Attachment B

Notice of Intent –
May 27, 2005

Notice of Intent

Wetland Remediation Activities

McCoy Field/New Keith Middle School Property
225 Hathaway Boulevard
New Bedford, Massachusetts

May 27, 2005

Prepared for:

City of New Bedford
New Bedford Public Schools
133 William Street
New Bedford, MA 02740

Prepared by:

BETA Group, Inc.
Engineers • Scientists • Planners
315 Norwood Park South, Norwood, MA 02062 781.255.1982 fax: 781.255.1974
6 Blackstone Valley Place, Lincoln, RI 02865 401.333.2382 fax: 401.333.9225
email: BETA@BETA-eng.com

Notice of Intent

McCoy Field/New Keith Middle School Property
225 Hathaway Boulevard
New Bedford, MA 02740

Prepared for: City of New Bedford
133 William Street
New Bedford, MA 02740

Prepared by: BETA Group, Inc.
315 Norwood Park South
Norwood, MA 02062

Project Scientist: James M. Smith

Associate: Alan D. Hanscom, P.E., LSP
Licensed Site Professional No. 2152

May 27, 2005

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BETA Group, Inc.
Engineers • Scientists • Planners

315 Norwood Park South
Norwood, MA 02062
(781) 255-1982 • fax (781) 255-1974
www.BETA-Inc.com

May 27, 2005

Ms. Sarah Porter, Conservation Agent
New Bedford Conservation Commission
133 William Street
New Bedford, MA 02740

Re: Submittal of Notice of Intent - McCoy Field Wetland Remediation
BETA Project No.: 2685

Dear Ms. Porter:

On behalf of the City of New Bedford, BETA Group, Inc. (BETA) is submitting the enclosed Notice of Intent (NOI) for the proposed remediation of the wetland portion of McCoy Field (the Site). This cover letter shall serve to provide you with an overview description of the proposed project. Please refer to the enclosed Wetlands Protection Act (WPA) Form 3 and its appendices for specific project details and all required submittals.

Background

As part of ongoing site assessment and remediation activities at the Site, BETA has compiled results of sediment sampling in the wetlands to the west of the new Keith Middle School construction project. Results compiled to date indicate an average exposure point concentration of polychlorinated biphenyls (PCBs) in this wetland area of approximately 1.3 parts per million (ppm).

ESS Group, Inc. has performed an ecological risk assessment of the wetlands area and concluded that no further action is required. Other contaminants of concern, including heavy metals and polynuclear aromatic hydrocarbons, were detected at concentrations that did not pose an unacceptable level of risk to the environment.

In recent consultation with U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) representatives, it was determined that cleanup of sediments with residual concentrations of PCBs greater than 1 ppm is the appropriate remedy. Please refer to the attached Executive Summary from the ESS Environmental Risk Characterization Report dated March 2005.

Proposed Remedial Approach

We propose to implement the removal of an estimated approximately 2 to 4 inches of PCB-impacted sediments at selected locations within the area illustrated on Figure 2 Site plan. The following activities are proposed:

- Clearing of vegetation and physical removal of leaf litter, surface vegetation, and surface sediment/soil by WES Construction Corporation (WES);
- Direction of Site activities by BETA's on-site representative;
- Live loading, transportation and disposal of sediment to appropriately licensed disposal facilities; and
- Restoration of disturbed areas, including replacement of the removed sediment/soil with clean sandy soil and seeding with wetlands mix, similar to that used for the current slope stabilization project at McCoy Field in accordance with the enclosed Wetland Restoration and Planting Plan prepared by Nover-Armstrong Associates.

Siltation and Sedimentation Control

Prior to the initiation of any Site activities, BETA will direct the placement of a double row of staked hay bales in staggered formation along the limit of work line as shown on Figure 2. All work and all Site disturbance will occur within the limit of work/hay bale line.

During the project, the Site contractor will be implementing the provisions of the Storm Water Pollution Prevention Plan (SWPPP) dated September 2004, included as Appendix E. The SWPPP addresses proper procedures for such items as removing silt from trucks and adjacent roadways, preventing fuel spills, and managing stormwater flow. Additionally, the contractor will be required to place jute erosion mats over open excavation areas to minimize erosion by stormwater runoff.

Temporary Driveways

WES will install temporary driveways where necessary to allow construction vehicle access to the areas of proposed excavation. These driveways will be constructed by the placement of non-woven geotextile fabric on the existing cleared ground surface followed by the placement of 6-12 inches of crushed stone. The driveways will be completely removed upon the completion of excavation and these areas will be restored in accordance with the Wetland Restoration and Planting Plan, included as Appendix B.

Excavation

WES will use a combination of a Bobcat or equivalent loader, hand tools, and vacuum excavation to remove 2 to 4 inches of leaf litter, sediment, and soil from the proposed area of excavation. Hand tools and vacuum excavation will be used to remove all soil within a five-foot radius of trees with a minimum 6-inch trunk diameter to maintain their viability. Trees will remain alive for a minimum of one year from the completion of backfilling or will be replaced by the Contractor. Excavated sediment will be transferred directly into dump trucks for removal from the Site and appropriate disposal.

Dewatering

Depending on Site conditions, limited dewatering may be necessary to remove standing surface water prior to excavation. If such dewatering is necessary, the Contractor will install shallow groundwater extraction wells (typically 4-6 feet deep) within the limits of work to remove surface water and provide a limited lowering of the local water table

during excavation. The extracted surface and groundwater will be pumped to an on-Site fractionation tank to provide settling followed by discharge into a settling basin to be constructed on-Site. This treatment and discharge will be performed under a National Pollutant Discharge Elimination System (NPDES) exclusion letter or an NPDES Construction General Permit (CGP), as appropriate, to be obtained by BETA from the EPA. A copy of a previously submitted NPDES application form, a CGP NOI form, and treatment system details are attached. BETA will be providing EPA with an updated application form for this project.

Regulatory Considerations

As discussed with the Conservation Commission, no Site work will be performed prior to a Site inspection and approval of the siltation controls by the Conservation Agent. Subsequently, BETA will coordinate a Commission inspection of the Site at the following project milestones:

- When erosion controls are installed, prior to any other work;
- After sediment has been excavated (Commission will inspect the soils to be replaced in the restored wetland at this time);
- After soils have been replaced (Commission will inspect plant material to be placed in restoration area at this time); and
- After final plantings are complete.

All siltation controls will be maintained until such time as authorization for their removal is provided by the Conservation Commission.

As discussed, in order to minimize disturbance to the wetland, BETA's goal is to have the work performed from August to early September, during the anticipated driest portion of the year. In anticipation of meeting this schedule, we are hopeful that the Conservation Commission will be able to provide an Order of Conditions for this project by mid July.

If you have any questions or concerns regarding this request, please call me at 781-255-1982.

Sincerely,
BETA GROUP, INC.

Alan D. Hanscom

Alan D. Hanscom
Associate

C: Scott Alfonse
Lenore White

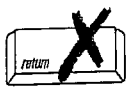
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP:
DEP File Number
Document Transaction Number
New Bedford
City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button for GIS locator):

225 Hathaway Blvd. (a. Street Address) | New Bedford (b. City/Town) | 02740 (c. Zip Code)

Latitude and Longitude: (d. Latitude) | (e. Longitude)

60, 75 (f. Assessors Map/Plat Number) | 69-125, 75-167 (g. Parcel /Lot Number)

2. Applicant:

Jacqueline (a. First Name) | Coucci (b. Last Name) | City of New Bedford (c. Company)

133 William Street (d. Mailing Address)

New Bedford (e. City/Town) | MA (f. State) | 02740 (g. Zip Code)

508-979-1433 (h. Phone Number) | (i. Fax Number) | jcoucci@ci.new-bedford.ma.us (j. Email address)

3. Property owner (if different from applicant): ☐ Check if more than one owner

Jacqueline (a. First Name) | Coucci (b. Last Name) | City of New Bedford (c. Company)

133 William Street (d. Mailing Address)

New Bedford (e. City/Town) | MA (f. State) | 02740 (g. Zip Code)

508-979-1433 (h. Phone Number) | (i. Fax Number) | jcoucci@ci.new-bedford.ma.us (j. Email address)

4. Representative (if any):

BETA Group, Inc (a. Firm)

Alan (b. Contact Person First Name) | Hanscom (c. Contact Person Last Name)

315 Norwood Park South (d. Mailing Address)

Norwood (e. City/Town) | MA (f. State) | 02062 (g. Zip Code)

781-255-1982 (h. Phone Number) | 781-255-1974 (i. Fax Number) | ahanscom@beta-inc.com (j. Email address)

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

exempt (a. Total Fee Paid) | (b. State Fee Paid) | (c. City/Town Fee Paid)

6. General Project Description:

Removal of contaminated soils and sediments from the wetland area located adjacent to the McCoy Field/Keith Middle School construction project. Reference is made to Attachments A and G which describe the proposed wetlands remediation activities, and the anticipated temporary ecological impacts and proposed mitigation measures.

A. General Information (continued)

7. Project Type Checklist:

a. ☐ Single Family Home
b. ☐ Residential Subdivision
c. ☐ Limited Project Driveway Crossing
d. ☐ Commercial/Industrial
e. ☐ Dock/Pier
f. ☐ Utilities
g. ☐ Coastal Engineering Structure
h. ☐ Agriculture – cranberries, forestry
i. ☐ Transportation
j. ☒ Other

8. Property recorded at the Registry of Deeds for:

Bristol
a. County

329;401
b. Page Number

849;885
c. Book

d. Certificate # (if registered land)

9. Has work been performed on the property under an Order of Resource Area Delineation involving Simplified Review within 3 years of the date of this application?

a. ☐ Yes b. ☐ No

10. Buffer Zone Only - Is the project located only in the Buffer Zone of a bordering vegetated wetland, inland bank, or coastal resource area?

a. ☐ Yes - answer 11 below, then skip to Section C.
b. ☒ No - skip to Section B.

If yes, no Notice of Intent or Request for Determination of Applicability may be filed for work within the 50-foot-wide area in the Buffer Zone along the resource area during the three-year term of an Order of Resource Area Delineation, or any Extended Order, or until the applicant receives a Certificate of Compliance, whichever is later.

11. Buffer Zone Setback – For projects that involve work only in the buffer zone, select the applicable adjacent resource area (check one):

a. ☐ BVW b. ☐ inland bank c. ☐ coastal resource area

The distance between the closest project disturbance and the associated resource area is:

d. linear feet

B. Resource Area Effects

1. Inland Resource Areas

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☒ Bordering Vegetated Wetland	Approx. 60,000 1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet
d. ☐ Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet of flood storage replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet of flood storage replaced
f. ☐ Riverfront area	1. Name of Waterway (if available)	

1. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

2. Total area of Riverfront Area on the site of the proposed project: _____ Square Feet

3. Proposed alteration of the Riverfront Area:

a. Total Square Feet _____ b. Square Feet within 100 ft. _____ c. Square Feet between 100 ft. and 200 ft. _____

4. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

5. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

B. Resource Area Effects

2. Coastal Resource Areas:

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. Square feet 2. Cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. Square feet	2. Cubic yards beach nourishment
e. ☐ Coastal Dunes	1. Square feet	2. Cubic yards dune nourishment
f. ☐ Coastal Banks	1. Linear feet	
g. ☐ Rocky Intertidal Shores	1. Square feet	
h. ☐ Salt Marshes	1. Square feet	2. Sq ft restoration, rehab., or creation
i. ☐ Land Under Salt Ponds	1. Square feet 2. Cubic yards dredged	
j. ☐ Land Containing Shellfish	1. Square feet	2. Square feet restoration, rehab.
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. Cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. Square feet	

3. Limited Project:

Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 or 310 CMR 10.53?

a. ☒ Yes ☐ No If yes, describe which limited project applies to this project:

310 CMR 10.53(3)(q) Assessment, monitoring, mitigation, and remediation activities

b. Limited Project

C. Bordering Vegetated Wetland Delineation Methodology

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Check all methods used to delineate the Bordering Vegetated Wetland (BVW) boundary:

1. ☐ Final Order of Resource Area Delineation issued by Conservation Commission or DEP (attached)
2. ☐ DEP BVW Field Data Form (attached)
3. ☐ Final Determination of Applicability issued by Conservation Commission or DEP (attached)
4. ☒ Other Methods for Determining the BVW Boundary (attach documentation):
   - a. ☒ 50% or more wetland indicator plants
   - b. ☒ Saturated/inundated conditions exist
   - c. ☒ Groundwater indicators
   - d. ☒ Direct observation
   - e. ☒ Hydric soil indicators
   - f. ☒ Credible evidence of conditions prior to disturbance
5. Other resource areas delineated: _____

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

D. Other Applicable Standards and Requirements

1. Is any portion of the proposed project located in estimated habitat as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program?

   a. ☐ Yes ☒ No If yes, include proof of mailing or hand delivery of NOI to:
   Natural Heritage and Endangered Species Program
   Division of Fisheries and Wildlife
   Route 135, North Drive
   Westborough, MA 01581

   June 1, 2003
   b. Date of Map

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

   a. ☐ Yes ☐ No If yes, include proof of mailing or hand delivery of NOI to:
   Massachusetts Division of Marine Fisheries
   251 Causeway Street, Suite 400
   Boston, MA 02114

   b. ☒ Not applicable – project is in inland resource area only

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or DEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

D. Other Applicable Standards and Requirements

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

5. Is any activity within any Resource Area or Buffer Zone exempt from performance standards of the wetlands regulations, 310 CMR 10.00.

   a. ☐ Yes ☒ No If yes, describe which exemption applies to this project:

   b. Exemption

6. Is this project subject to the DEP Stormwater Policy? a. ☐ Yes ☒ No

   If yes, stormwater management measures are required. Applicants should complete the Stormwater Management Form and submit it with this form.

   b. If no, explain why the project is exempt:

   The project is located within a wetland area. There will be no activities conducted outside the wetland boundary within the scope of this NOI which may alter storm water flow or pose a storm water management concern.

E. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.
3. ☐ Other material identifying and explaining the determination of resource area boundaries shown on plans (e.g., a DEP BVW Field Data Form).
4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.
5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. ☐ Attach NOI Wetland Fee Transmittal Form
9. ☐ Attach Stormwater Management Form, if needed.

F. Fees

The fees for work proposed under each Notice of Intent must be calculated and submitted to the Conservation Commission and the Department (see Instructions and NOI Wetland Fee Transmittal Form).

No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

1. Municipal Check Number
2. Check date
3. State Check Number
4. Check date
5. Payor name on check: First Name
6. Payor name on check: Last Name

G. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Signature of Applicant — Date: 5/07/08

Signature of Property Owner (if different) — Date

Signature of Representative (if any) — Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents; two copies of pages 1 and 2 of the NOI Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

For DEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents; one copy of pages 1 and 2 of the NOI Wetland Fee Transmittal Form; and a copy of the state fee payment must be sent to the DEP Regional Office (see Instructions) by certified mail or hand delivery. (E-filers may submit these electronically.)

Other:
If the applicant has checked the "yes" box in any part of Section D, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP:

DEP File Number

Document Transaction Number

New Bedford
City/Town

F. Fees

The fees for work proposed under each Notice of Intent must be calculated and submitted to the Conservation Commission and the Department (see Instructions and NOI Wetland Fee Transmittal Form).

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Signature of Applicant

Date 5/27/05

Signature of Property Owner (if different)

Date

Signature of Representative (if any)

Date

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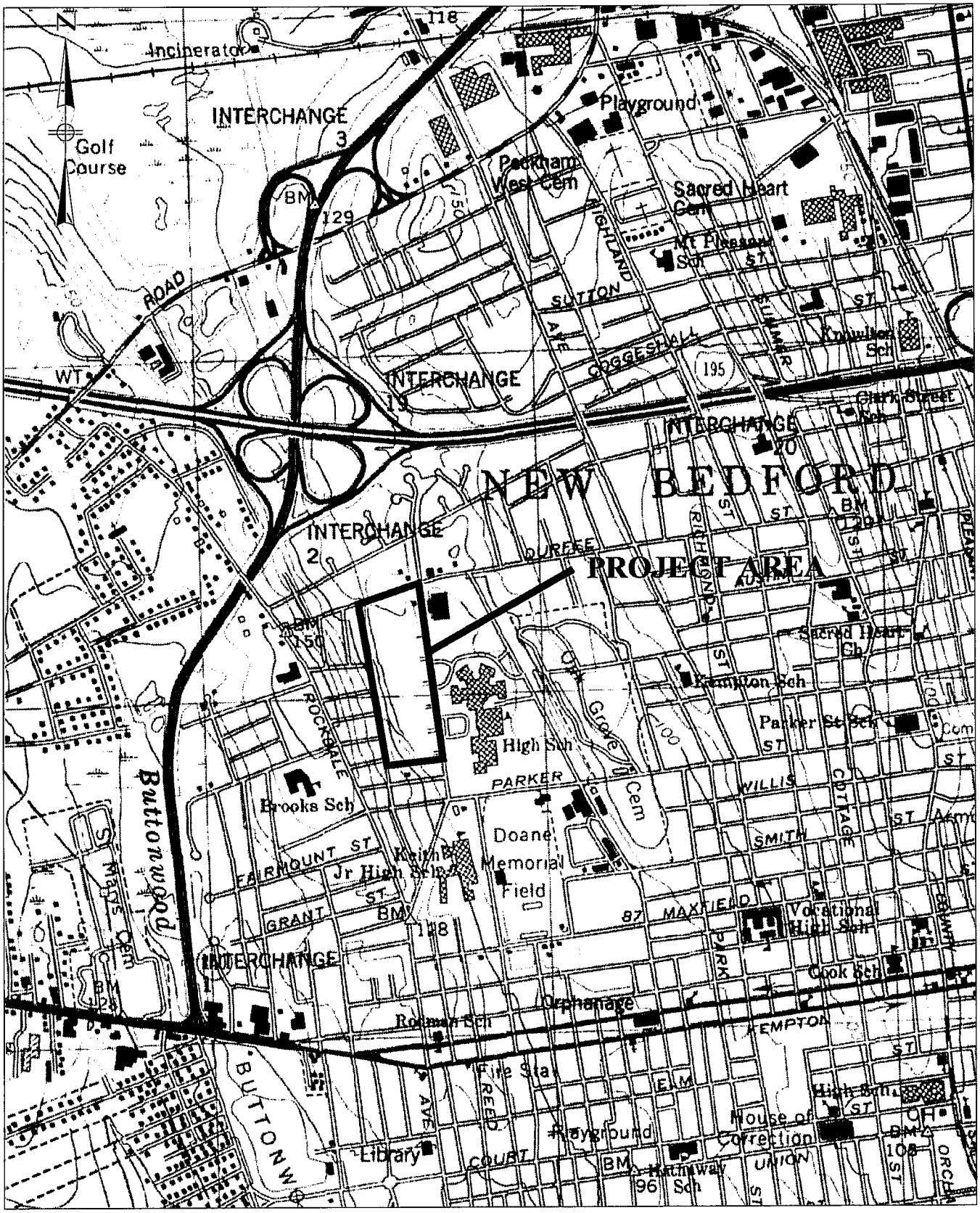


BETA Group, Inc.
Engineers • Scientists • Planners

315 Norwood Park South
Norwood, MA 02062 781.255.1982
email: BETA@BETA-Inc.com

McCOY FIELD/NEW KEITH MIDDLE SCHOOL PROPERTY
New Bedford, Massachusetts

Figure No. 1

USGS Locus Map

C:\2600s\2685 – New Bedford Sampling Plan\Locus Maps\New Bedford Locus Map.dwg May 13,2005 3:18pm

THE FOLLOWING FIGURES ARE AVAILABLE AS HARD COPY (PAPER) PLANS

Figures 2A & 2B – Site Topographic Plan (1" = 40') With Sequence of Construction

Figure 3 – Wetlands Cross Sections

THESE PLANS ARE AVAILABLE FOR VIEWING AT:

CITY OF NEW BEDFORD PUBLIC LIBRARY
613 PLEASANT STREET
NEW BEDFORD, MA 02740

CONTACT NUMBERS
PHONE: (508) 991-6275
FAX: (508) 979-1481

SCHEDULE OF HOURS
MONDAY – THURSDAY
9:00AM – 9:00PM
FRIDAY & SATURDAY
9:00 AM – 5:00 PM

CLOSED SUNDAY & HOLIDAYS
HANDICAPPED ACCESSIBLE

Appendix A

ESS Method 3 Risk Assessment Executive Summary

EXECUTIVE SUMMARY

A Method 3 Risk Characterization was performed for the former McCoy Field wetland areas located at the property bounded by Hathaway Boulevard to the east, Durfee Street to the north, Summit Street to the west, and Ruggles Street to the south in New Bedford, Massachusetts [Release Tracking Number (RTN) 4-15685] (the Site). The Method 3 Risk Characterization evaluated the potential risk of harm to human health, the environment, public welfare, and safety in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000) (MCP) and *Guidance for Disposal Site Risk Characterization in Support of the Massachusetts Contingency Plan* (Massachusetts Department of Environmental Protection [MADEP], July 1995). The conclusion of the Method 3 Risk Characterization is that the Site poses ***No Significant Risk of harm to human health, public welfare, safety and the environment.*** No activity and use limitations (AULs) or use of engineered barriers were assumed in the risk characterization.

McCoy Field is a former recreational field located in a residential section of New Bedford; bounded by Hathaway Boulevard to the east, Durfee Street to the north, Summit Street to the west, and Ruggles Street to the south. The former McCoy Field property consists of two distinct areas: an upland area that being developed as the new Keith Middle School, and a heavily vegetated, deciduous wood swamp wetland area located north and west of the upland area, which is addressed in this risk characterization. The wetland area contains an unnamed stream that originates from another wetland area about 1.5 miles north of the Site and either terminates or is culverted at the southern end of the Site. The wetland area typically dries up in summer.

McCoy Field was constructed in the 1960s by filling a low area with fill material obtained from the site of the high school during the high school's construction. The high school site was historically operated as a burning dump and fill material from this site consisted of black fine sand and organic silt containing ash, asphalt, concrete, brick, glass, metal, and wood materials. During planning activities for the new middle school, subsurface investigations identified the presence of the fill material in the upland area and, in it, chemical constituents above MADEP reportable concentrations. Historic filling of the wetland area did not occur, but some chemical constituents in the fill material reached the wetland area through atmospheric dispersion, erosion, or other pathways.

The human health risk characterization assessed the potential risk posed by the Site to recreational receptors, pedestrians, and trespassers, all of which were assessed for the same level of exposure. These receptors were assessed for exposure through soil/sediment ingestion, soil/sediment dermal contact, inhalation of entrained soil particles (dust), surface water ingestion, and surface water dermal contact. Constituents of concern (COCs) included polychlorinated biphenyls (PCBs, as Aroclor 254), thirteen polycyclic aromatic hydrocarbons (PAHs), and the metals barium, cadmium, total chromium, lead, mercury, and selenium. The numerical results of the human health risk characterization are summarized below:

RECREATIONAL/PEDESTRIAN/TRESPASSER RISK CHARACTERIZATION SUMMARY

Exposure Pathway	Child		Youth		Adult		Combined Ages
	Hazard Index	Cancer Risk	Hazard Index	Cancer Risk	Hazard Index	Cancer Risk	Cancer Risk
Total (all pathways)	0.3	6×10^{-7}	0.06	2×10^{-7}	0.04	2×10^{-7}	1×10^{-6}
Maximum Acceptable Level	1.0	1×10^{-5}	1.0	1×10^{-5}	1.0	1×10^{-5}	1×10^{-5}

Total HIs and total cancer risks are below maximum acceptable levels for all age groups, indicating that the Site poses no significant risk of harm to human health for these receptor groups.

The environmental risk characterization assessed terrestrial and aquatic invertebrates for survival, and amphibians, two avian species (American robins and red-tailed hawks), and two mammalian species

(short-tailed shrew and raccoons) for survival, growth and reproduction. Terrestrial invertebrates were assessed for direct exposure to COCs in soil; aquatic invertebrates and amphibians were assessed for direct exposure to COCs in sediment interstitial (pore) water or surface water impacted by COCs in sediment; avian and mammalian receptors were assessed for exposure to COCs through soil ingestion, surface water ingestion, and COCs in their diet. For both of these receptors, low and high hazard indices (HI) were calculated. Numerical results of the environmental risk characterization are summarized below:

Receptor Group	Hazard Index -Low	Hazard Index-High
Terrestrial Invertebrates	0.4	-- [1]
Aquatic Invertebrates	0.6	--
Amphibians	1.4	--
American Robin	16	1
Red-Tailed Hawk	0.2	0.01
Short-tailed Shrew	19	3
Raccoon	0.4	0.2
Benchmark Hazard Index	**1.0**	**1.0**

1. A "high" scenario was not assessed for this receptor group.

Total HIs for terrestrial invertebrates, aquatic invertebrates, red-tailed hawk, and raccoons are below the maximum acceptable HI benchmark of 1.0, indicating that the Site poses no significant risk of harm to these receptor groups.

The HI of 1.4 for amphibians slightly exceeds the maximum acceptable HI benchmark of 1.0 as a result of exposure to lead. However, based on the number of conservatisms inherent in the risk characterization, some of which are presented below, the risk characterization concludes that a significant risk of harm is not posed to amphibians:

- The lead TRV of 0.4 µg/L is based on the most sensitive species for which data was located;
- The lead TRV was based on a median lethal concentration (LC50) divided by an uncertainty factor of 100;
- The lead TRV is below the federal ambient water quality criterion of 0.54 µg/L at the lowest considered water hardness of 25 mg/L;
- The lead surface water EPC of 0.44 µg/L is also below the federal ambient water quality criterion of 0.54 µg/L at a water hardness of 25 mg/L;
- The EPC was based on one-tenth of the predicted interstitial water concentration, whereas the overlying water column may be much more diluted from on-flowing surface water; and,
- The predicted interstitial water concentration was based on the 95th upper confidence limit (UCL) of the mean soil/sediment lead concentration of 175.8 mg/kg, while the mean soil/sediment lead concentration is 141 mg/kg and the median concentration is 93 mg/kg.

The total HI-Low of 16 and HI-High of 1 for the American robin were primarily associated with exposure to PCBs and lead. However, based on the number of conservatisms inherent in the risk characterization, some of which are presented below, the risk characterization concludes that a significant risk of harm is not posed to American robins:

- Robins were assumed to feed nowhere else but at the Site;
- There was no consideration of the periodic inaccessibility of wetland soil due to submergence;
- The soil/sediment EPCs for PCBs and lead are both 95% UCL mean concentrations;
- All COCs were assumed 100% absorbed through the ingestion route;

- Bioaccumulation and bioconcentration factors did not consider the reduction of accumulation that may stem from the high binding capacity of the soil/sediment (the average total organic carbon content of the soil/sediment is 31.7%);
- The TRV-Low value applied for PCBs was on the low end of the range of values available. Using the highest TRV-Low value, the HQ for PCBs would be reduced from 12 to 6.
- The range of the HIs calculated (1 – 16) is well within the range of uncertainty associated with the assessment.

The total HI-Low of 19 and HI-High of 3 for short-tailed shrew were primarily associated with exposure to PCBs and lead. However, based on the number of conservatisms inherent in the risk characterization, some of which are presented below, the risk characterization concludes that a significant risk of harm is not posed to short-tailed shrew:

- Shrew were assumed to feed nowhere else but at the Site;
- There was no consideration of the periodic inaccessibility of wetland soil due to submergence;
- The soil/sediment EPCs for PCBs and lead are both 95% UCL mean concentrations;
- All COCs are assumed 100% absorbed through the ingestion route;
- Bioconcentration factors do not consider the reduction of accumulation that may stem from the high binding capacity of the soil/sediment;
- The TRV-Low values applied for PCBs and lead were in the center of the ranges of relevant values available. Using the highest TRV-Low values, the HQ for PCBs would be reduced from 9 to 3 and the HQ for lead would be reduced from 5 to 1.2. From these two changes, the overall HI-Low would be reduced from 19 to 9.
- The range of the HIs calculated (3 – 19) is well within the range of uncertainty associated with the assessment.

Potential risks to safety and public welfare were conducted according in MADEP guidance. These assessments concluded that the Site poses no significant risk of harm to safety or public welfare.

Appendix C

Construction Specifications

Appendix C1

Site Preparation

SECTION 02100

SITE PREPARATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Bidding requirements, Contract Forms, General and Supplementary Conditions and Division I, General Requirements are hereby made a part of this Section. The Order of Conditions, File No. ___, issued by the New Bedford Conservation Commission is included in this contract.

1.02 DESCRIPTION OF WORK

A. The scope of work consists of all materials, equipment, labor and services required for all Site Preparation work, including all items incidental thereto, as specified herein and as shown on the Drawings.

B. Include the following:

1. Protection of trees (including roots) marked by Engineer with trunks greater than six (6) inches in diameter.

2. Clearing within the limits of work by cutting and removing, together with proper disposal of, shrubs, brush, trees of trunk diameter less than six (6) inches, and other objectionable materials, if any, except as otherwise provided herein.

3. No burning on the site shall be permitted.

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Carefully examine all of the Contract Documents for requirements which affect the work of this section.

B. Other specifications sections which directly relate to the work of this section include, but are not limited to, the following:

1. Excavation and Management of Wetland Sediment
2. Section 02200 – Earthwork
3. Section 02270 – Sedimentation and Erosion Control

1.04 CODES, STANDARDS, ORDINANCES AND PERMITS

A. Perform all work in strict accordance with all rules, regulations, standards, codes, ordinances, or laws of local, State and Federal authorities having lawful jurisdiction, and be responsible for compliance therewith. Such authorities include but are not limited to the following:

1. Occupational Safety and Health Administration (OSHA)

2. American Society of Testing Materials (ASTM)

3. Massachusetts Department of Public Safety Standard Specification (MASS DPS)

4. Massachusetts Department of Environmental Protection (DEP)

5. Commonwealth of Massachusetts, Board of Fire Prevention Regulations, 527 CMR 9.00

6. National Fire Protection Association, Standard No. 30, Flammable and Combustible Liquids Code

B. The Contractor shall give the proper authority all requisite notices and secure all permits, licenses, inspections and certificates relating to his work.

1.05 SUBMITTALS

A. Prior to commencement of any site preparation operations, submit to the Architect, for review, a schedule for the proposed methods to insure against possible damage to existing areas adjacent to where excavation operations will occur.

B. Include a full description and plan for securing the site, safety devices and measures to be taken and time table for implementation.

1.06 SURFACE/SUBSURFACE INFORMATION

A. The Owner assumes no responsibility for the Contractor's failure to make his own site investigation.

1.07 PROTECTION

A. All rules and regulations governing the respective utilities shall be observed in executing all work under this Section. All work shall be executed in such a manner as to prevent any damage to existing buildings, streets, curbs, paving, service utility lines, structures and adjoining property. Monuments and benchmarks shall be carefully maintained and, if disturbed or destroyed, replaced as directed.

B. Prior to start of Contractor's work, Engineer will mark selected trees (generally with trunk diameters of six (6) inches or greater) within the limit of work. Trees so marked shall be protected during the work such that they will remain undamaged and remain viable as a result of excavation and backfilling as described in this and related sections. Trees that are not viable at one year after the completion of backfilling shall be replaced by Contractor at his sole expense.

C. The Contractor shall assume full responsibility for damages caused by his or his Subcontractor's equipment and personnel to the existing streets, vegetation, and grounds, as well as adjoining private property.

D. The work of this Section shall be performed in such a manner as to cause no interference with access by the Subcontractors or other Contractors to all portions of the site as is necessary for the normal conduct of their work.

1.08 CLEAN UP

A. Any soil, demolition debris or similar material which has been brought onto paved areas by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PREPARATION

A. Notify all corporations, companies, individuals or local authorities owning, or having jurisdiction over, utilities running to, through or across areas disturbed by demolition operations.

B. Have all utility services not otherwise designated to be disconnected by the Contractor disconnected at service mains in accordance with requirements governing the utility involved unless otherwise shown on the plan or directed by the Architect.

C. Install siltation barrier as described in City of New Bedford Conservation Commission Order of Conditions No. _____ and in Section 02270 Sedimentation and Erosion Control.

3.03 CLEARING

A. Clearing shall consist of the cutting and removal of all trees (excepting those marked by the Engineer for protection), shrubs, brush, and other objectionable material from within the Limit of Work Line unless otherwise shown on the plans or directed by Engineer.

3.04 DISPOSAL AND CLEAN UP

A. Disposal:

1. Cleared vegetation consisting of trees, shrubs, and brush that prior to the start of clearing was not in contact with the ground, may be disposed of as non-contaminated landscaping debris.

2. Other objectionable removed material will be disposed of by the Contractor at a facility approved by the Engineer.

3. Soil, sediment, leaf litter, and vegetation debris excavated for wetland remediation shall be disposed of in accordance with "Excavation and Management of Wetland Sediment."

3. Keep all public ways clear of all spillage from trucks hauling material to and from the project site.

B. Premises:

1. The premises shall be left in a safe, clean and relatively orderly condition upon completion of work under this Section.

C. Dust Control:

1. Thoroughly wet down all work being demolished and all trucking ways as necessary to prevent spreading dust. If necessary, provide all water, hoses and connections required for dust control.

END OF SECTION

Appendix C2

Earthwork

SECTION 02200

EARTHWORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Bidding requirements, Contract Forms, General and Supplementary Conditions and Division I, General Requirements are hereby made a part of this Section. The Order of Conditions, File No.____, issued by the New Bedford Conservation Commission is included in this contract.

1.02 DESCRIPTION OF WORK

A. The scope of work consists of all materials, equipment, labor and services required for all Earthwork work, including all items incidental thereto, as specified herein and as shown on the Drawings. The following work shall be included:

1. Provide crushed stone placed on geotextile fabric to create temporary driveways from site upland areas to the wetland areas of excavation.
2. Pumping and/or bailing necessary to maintain excavated spaces free from water from any source whatsoever.
3. Remove four (4) to six (6) inches of sediment by Bobcat loader, hand tools, and vacuum excavation to the horizontal limits shown on Figure 2.
4. Provide clean sandy fill, with 8-10% organic content, as specified, for wetland restoration.
5. Protect all existing utilities, roads, pavements, lawns, planting and other improvements from damage due to construction. Install fencing and safety devices or controls as necessary.
6. Dust control and clean up.

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Other specifications sections, which directly relate to the work of this section include, but are not limited to, the following:

1. Section 02100 - Site Preparation
2. Section 02270 – Sedimentation and Erosion Control
3. Excavation and Management of Wetland Sediment

1.04 REFERENCE STANDARDS

A. Definitions and Reference Standards:

1. ASTM: Specifications of the American Society for Testing and Materials.
2. AASHTO: American Association of State Highway and Transportation Officials.
3. ACI: American Concrete Institute.
4. Building Code: Commonwealth of Massachusetts State Building Code, latest edition.
5. EPA: United States Environmental Protection Agency.

6. DEP: Massachusetts Department of Environmental Protection.

7. SSHB: Standard Specifications for Highways and Bridges, the Commonwealth of Massachusetts, Mass. Highway Department, latest edition.

1.05 BENCHMARKS AND ENGINEERING

A. Lines and grade work in accordance with Drawings and Specifications shall be laid out by a registered Civil Engineer or Surveyor employed by the Contractor. The Contractor shall establish permanent benchmarks, to which access can easily be had during the progress of the work. The Contractor shall maintain all established bounds and benchmarks and replace, as directed, any that may be disturbed or destroyed. The selection of the registered Civil Engineer or Surveyor shall be subject to the Architect's approval. The General Contractor shall pay all costs of the services of the Civil Engineer or Surveyor.

B. The Contractor shall verity dimensions and elevations on the ground and report any discrepancies immediately to the Architect. Any discrepancies not reported prior to construction shall not be the basis for claims for extra compensation.

1.06 SUBSURFACE INFORMATION

A. The Owner assumes no responsibility for the Contractor's failure to make his own site investigation and makes no representation regarding the character of the soil or subsurface conditions which may be encountered during the performance of the work.

1.07 FINISHED GRADES

A. The words "finished grades" as used herein mean the required final grade elevations indicated on the Drawings. Where not otherwise indicated, areas shall be given uniform slopes between points for which finished grades are shown, or between such points and existing grade except that vertical curves or roundings shall be provided at abrupt changes in slope.

1.08 PROTECTION

A. All rules and regulations governing the respective utilities shall be observed in executing all work under this Section. All work shall be executed in such a manner as to prevent any damage to existing buildings, streets, curbs, paving, service utility lines, structures and adjoining property. Monuments and benchmarks shall be carefully mainlined and, if disturbed or destroyed, replaced as directed.

B. The Contractor shall protect selected trees of six (6) inch trunk diameter or greater marked by the Engineer and their roots in the excavation area as described in excavation section below.

C. Contractor shall place hay bales at perimeter of work area as required by the Cit of New Bedford Conservation Commission. The location and installation of the hay bales will be approved by the Conservation Commission. No disturbance of soil or vegetation shall be allowed outside of this designated work area.

D. The Contractor, under this Section, shall provide at his own expense adequate pumping and drainage facades to keep the excavation sufficiently dry as not to affect adversely the quality or time of excavation.

E. The Contractor shall assume full responsibility for damages caused by him or his Subcontractor's equipment and personnel to the existing buildings and grounds as well as adjoining private property.

F. The work of this Section shall be performed in such a manner as to cause no interference with access by the Subcontractors or other Contractors to all portions of the site as is necessary for the normal conduct of their work.

PART 2 - PRODUCTS

2.01 FILL MATERIAL

A. Crushed Stone: Crushed stone to be placed on geotextile fabric to serve as a temporary driveway for excavation equipment shall be washed, graded free of organic materials one and one-quarter (1-1/4) inch to one-half (1/2) inch size. Gradation shall conform to SSHB., Section M2.01.3 as follows:

U.S. Standard Sieve Size	Percent by Weight Passing Minimum	Maximum
1-1/2 inches	100%	-
1-1/4 inches	85%	100%
3/4 inch	10%	25%
1/2 inch	0%	8%

B. Wetland topsoil fill: Clean sandy soil shall be used as backfill for restoring the excavated area of the wetland:

U.S. Standard Sieve Size	Percent by Weight Passing Minimum	Maximum
3/4 inch	100%	100%
No. 4	80%	100%
No. 200	0%	10%
(Based on fraction passing No. 4)		
Organic Content	8%	10%

PART 3 - EXECUTION

3.01 EXCAVATION

A. General:

1. Excavate all vegetation, leaf litter, soil, and sediment to the elevations and dimensions shown on the Drawings. Excavation will generally be 2-4 inches in depth and is not expected to extend greater than six (6) inches below grade. Confirmation of sufficient initial excavation shall be by the visual observations of the Engineer. Contractor shall coordinate with the Engineer regarding the Engineer's collection of post-excavation confirmatory soil samples to verify the removal of sufficient contaminated sediment.

2. Contractor shall remove sediment from areas within five (5) feet of trees marked by Engineer for protection using vacuum excavation. Contractor shall loosen soils in these areas using hand tools prior to vacuuming, taking care to minimize damage to tree roots.

3. In order to allow excavating equipment (Bobcat skid steer loader, or equivalent) access to the areas to be excavated, Contractor shall, as necessary, construct temporary driveway(s) to consist of six (6) to twelve (12) inches of crushed stone placed on geotextile fabric.

4. The Contractor shall obtain from the proper authorities locations of all utilities within the scope of this work so that there will be no damage done to such utilities. Neither the Owner nor the Architect will be responsible for any such damage, and the Contractor shall restore any structure or utility so damaged without additional compensation. Written notifications to the appropriate utility agencies shall be made at least ten (10) days prior to the commencement of any work.

5. Any unsanitary conditions encountered, such as broken sewer mains or uncovered garbage, shall be corrected or removed entirely as directed by the Architect.

3.02 DEWATERING

A. Provide all pumps and pumping facilities, including a well point system as necessary with attendants, to keep all areas of excavation free from water from whatever source at all times, when work is in progress or when necessary for protection and integrity of the work in place. Dewatering treatment and discharge will be conducted by the Contractor in accordance with either an NPDES exclusion letter or NPDES Construction General Permit, as appropriate, to be obtained by the Engineer.

3.03 FILLS. BACKFILLS AND COMPACTION

A. Samples and Testing:

1. All fill material and its placement shall be subject to quality control testing. A qualified laboratory may be selected by the Owner to perform tests on materials. All costs of testing will be paid for by the Owner. Test results and laboratory recommendations shall be available to the Architect.

2. Provide samples of each fill material from the proposed source of supply including on-site sources. Allow sufficient time for testing and evaluation of results before material is needed. Submit samples from alternate source if required.

3. Architect will be sole and final judge of suitability of all material.

B. Placing Fills and Compacting

1. Fill material shall be placed in a single lift. Compaction will be _____ .

2. Contractor shall use hand tools to ensure fill is worked into areas of protected trees' exposed roots.

3. Notify the Engineer when excavation is ready for inspection. Filling and backfilling shall not be started until conditions have been approved by the Engineer.

3.04 DUST CONTROL

A. If needed, the Contractor shall employ all possible methods and/or materials to prevent the spread of dust. Chemical materials may not be used.

3.05 Wetland Restoration

A. Contractor shall seed and replant area of excavation in accordance with the "Wetland Restoration and Plantings Plan" dated _____ prepared by Nover-Armstrong Associates, Inc. of Carver, Massachusetts and incorporated in its entirety in this section by reference.

3.06 CLEAN UP

A. Contractor shall remove all geotextile and crushed stone used for driveways upon completion of sediment excavation. Areas previously covered by a temporary driveway shall be seeded and planted in accordance with the Wetlands Restoration Plan.

B. The Contractor shall remove all debris, construction equipment and scrap material from all areas within the limit of work prior to inspection for acceptance.

END OF SECTION

Appendix C3

Excavation and Management of Wetland Sediment

EXCAVATION AND MANAGEMENT OF WETLAND SEDIMENT

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Work under this Section shall include all labor, materials, equipment, supervision and supplies necessary for the excavation, removal, segregation, handling, temporary stockpiling, loading, transportation and off-site management of contaminated soils and sediment in the wetlands area immediately adjacent to the new Keith Middle School construction site, to the lines and grades indicated on the Contract and/or as directed by the Engineer. For purposes of this Section, the Engineer (or Engineer) is BETA Group, Inc. The unsuitable sediment and soils contain levels of polychlorinated biphenyls (PCBs), heavy metals (particularly barium and lead), and polynuclear aromatic hydrocarbons (PAHs).

B. The contaminated soil and sediment to be excavated under this project exist within six inches of grade. No excavation will be permitted deeper than six inches without the specific authorization of the Engineer.

C. The Work shall include, but not be limited to, the following:

1. Mobilization and demobilization of all personnel, equipment, materials and supplies required to perform the Work;
2. Submittal of all required certifications demonstrating that personnel are properly trained and qualified to perform the Work in accordance with applicable OSHA regulations and all laws governing the Work;
3. Securing all permits and licenses, as necessary, including notification of local emergency personnel and notification/reporting requirements, with respect to unforeseen conditions;
4. Installation of a double row of staked haybales in staggered formation at the perimeter of the work area as shown on Figure 2, Wetlands Sediment Remediation Area;
5. Clearing and grubbing of all vegetation, including trees less than six (6) inches in diameter as measured at breast height above existing grade;
6. Excavation, on-site handling, loading and transportation of contaminated soils, primarily consisting of vegetation; leaf litter; sand, silt, and clay sediment; and other unsuitable subgrade materials, as directed by Engineer;
7. Assisting Engineer in obtaining environmental samples;
8. Segregating and temporarily storing portions of the excavated wastes/regulated spoils, if directed by the Engineer;
9. Coordinating all off-site recycle/disposal of excavated materials, based upon existing in-situ characterization results and/or supplemental sampling and analytical results provided by Engineer;
10. Selecting appropriately licensed off-site recycle or disposal facilities;
11. Backfilling excavated areas with clean, off-Site, sandy soil;
12. Placement of a wetmix/wetlands seed mix over the replacement sandy soil. The wetmix will be composed of seeds that will germinate and produce a permanent cover of grasses, forbs, wildflowers, legumes, and grasses;
13. If it becomes necessary to delay restoration because of adverse or unsuitable weather conditions, the excavated area shall be covered with mulch or organic cover to protect against erosion until conditions for re-vegetation (as determined by the Engineer) are more suitable; and

13. Perform general site cleanup.

D. Schedule – Work shall not commence until the Engineer determines that site conditions are suitably dry and/or otherwise acceptable so as to reduce the compaction impacts by equipment and/or other excessive site disturbances.

1.02 APPLICABLE LAWS AND REGULATIONS

A. Work under this Section shall be performed in strict compliance with all applicable Federal, State and local laws, rules, regulations related to the handling and off-site management of contaminated wastes and regulated soil. Specific reference is made to the fact that PCB-impacted soil to be excavated and managed off-site is regulated under the Toxic Substances Control Act (TSCA).

B. Pertinent Federal and State Authorities having jurisdiction over this project include:

1. Occupational Safety and Health Administration (OSHA)
2. U.S. Environmental Protection Agency (EPA)
3. Massachusetts Department of Environmental Protection (MADEP)

C. The following OSHA regulations will apply:

1. Occupational Safety and Health Standards, Hazardous Waste Operations and Emergency Response - 29 CFR 1910.120.
2. Safety and Health Regulations for Construction - 29 CFR 1926.

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Other Sections that directly relate to the Work of this Section include, but are not limited to, the following:

1. Section 02100 – Site Preparation

2. Section 02200 - Earthwork

3. Section 02270 – Sedimentation and Erosion Control

1.04 SUBMITTALS

A. No Work will be permitted to proceed until the required submittals have been received and approved by the Engineer. In the event the Engineer requests additional information, it shall be the Contractor's responsibility to provide such additional information in a complete and timely manner, so that construction can proceed by the date stipulated in the Information for Bidders.

B. Within seven (7) calendar days after execution of this Contract, the Contractor shall submit three (3) copies of the following to the Engineer for approval:

i. Names and qualifications of all proposed subcontractors, if any, identifying the tasks to be performed by each proposed Subcontractor.

C. Approval of submittals by the Engineer shall not impose any liability upon the Engineer or the City of New Bedford, nor shall any such approval relieve the Contractor of his/her

responsibilities to meet all of the requirements and comply with all applicable laws, regulations and other applicable requirements under this Contract.

D. Within 21 days after substantial completion of the Work, the Contractor shall submit to the Engineer one (1) original copy of all manifests, certified weigh slips (tons), bills-of-lading, and records of final waste disposition from the accepting disposal facility (ies), and all other pertinent documentation, including a summary of dates and quantities relating to the off-site management of wastes and regulated soil.

1.05 EXISTING ENVIRONMENTAL CONDITIONS

A. The project site is a confirmed disposal site, as defined under the Massachusetts Contingency Plan (MCP). The Department of Environmental Protection (DEP) has assigned the Site a release tracking number of 4-0015685.

B. The project site has received "Special Project" designation, as defined under the MCP, by the Southeast Regional Office of the DEP.

D. The material to be excavated from the Site is at a depth of six inches or less below existing wetlands elevation, and primarily consist of surface deposition of sediment from runoff from the adjacent ash and C&D landfill. The contaminants of concern include semi-polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), barium, cadmium, total chromium, lead, mercury, and selenium. The concentrations of these contaminants do not pose a Significant Risk as determined by an MCP Method 3 Risk Assessment under any foreseen exposure scenarios.

D. The Contractor shall satisfy himself/herself as to the conditions existing at the Site, the type of equipment required to perform this Work, and the quality and quantity of the materials to be removed. Additional environmental data relative to in-situ characterization of wastes and soils to be excavated under this Contract will be provided by the Engineer.

E. Failure of the Contractor to become fully acquainted with the available information will not relieve him/her of the responsibility to completely and properly perform the work in full compliance with the Contract Documents. The Engineer assumes no responsibility for any conclusion or interpretation made by the Contractor on the basis of information made available by the Owner or Engineer.

PART 2 - PRODUCTS [NOT USED]

PART 3 - EXECUTION

3.01 GENERAL

A. Provide adequate barriers and demarcation of excavations and exclusion zones to warn site visitors and the public of potential hazards.

B. Provide for on-site monitoring of VOC's, if any, and airborne particulates (dust).

C. Take appropriate means to prevent a release or the spread of hazardous wastes or contaminated materials as a result of the Contractor's operations.

D. Assist the Engineer with collection of post-excavation soil and/or groundwater samples for laboratory analyses, as requested.

E. Separately stockpile characteristically different soil, material and other bulky wastes from that which is live-loaded for off-site management, for separate characterization by the Engineer. The quantity of wastes/soil to be segregated for separate characterization and off-site management is not expected to exceed 500 cubic yards.

3.02 SITE HEALTH & SAFETY

A. The Contractor is solely responsible for controlling Site health and safety, including the provision of a Site H&S Officer. In the performance of its Work, the Contractor shall provide for the safety of all Contractor personnel, other Contractors' personnel, regulatory agency personnel, and the public for the duration of the Contract.

B. The Contractor is solely responsible for his/her construction means and methods.

C. The Engineer will be responsible for the H&S of its personnel only.

D. The Contractor shall rely on the existing Health and Safety Plan (HASP) which addresses identified contaminants of concern for the Work under this Contract and conforms to the requirements of OSHA 1910.120 and all other applicable federal, state, and local laws, regulations, ordinances, and procedures. The HASP shall continue to be implemented by the Contractor's Safety Officer experienced with the health and safety requirements of OSHA 1910.120. The HASP shall be revised, as needed, whenever new information about site hazards is obtained.

G. All personnel performing Work in contaminated or hazardous areas shall be fully trained in accordance with the OSHA 1910.120 and the HASP and shall be thoroughly briefed on anticipated hazards, safety equipment to be employed, safety practices to be followed, and emergency procedures and communications. The Contractor shall have a medical monitoring surveillance program in place for all personnel in accordance with all applicable laws and regulations.

3.03 MISCELLANEOUS PROVISIONS

A. If hazardous wastes are to be transported from the Site, Contractor must have a valid EPA identification number and any other permits or licenses required by federal, state, and local laws, regulations, ordinances, and procedures.

B. With the exception of the NPDES dewatering discharge permit, the Contractor shall be responsible for securing all necessary and applicable permits, certificates, licenses, and approvals required for the performance of this Work and shall be responsible for the payment of all associated fees.

C. The Contractor shall comply with all required reporting and record keeping requirements in accordance with the provisions of this Contract and all applicable federal, state, and local laws, regulations, ordinances, and procedures.

D. The Contractor shall be responsible for all notifications required by federal, state, and local laws, regulations, ordinances, and procedures. All notifications shall be coordinated with the Engineer.

E. Material Shipping Records and/or Bills of Lading, as appropriate, will be provided and coordinated by the Engineer. The Owner will be responsible for signing all waste manifests and bills of lading. In order for Contractor's operations to proceed without interruption, complete and accurate information shall be provided by the Contractor during the Submittals process.

F. The Contractor will be responsible for providing EPA Waste Manifests and other such documentation required by any out-of-state receiving facilities.

3.04 DUST MONITORING & CONTROL MEASURES

A. The Contractor is responsible for monitoring the Work for overt evidence of airborne particulates (dusts) emanating from the Work area. It shall be the Contractor's responsibility to continuously monitor the work area (including the exclusion zone) for dust levels. The maximum allowable particulate level is 400 µg per cubic meter.

B. The Contractor shall take appropriate measures to substantially eliminate the generation of dusts within the Work Area, including use of water provided by the Contractor and covering all stockpiled wastes and/or soils, except in the immediate vicinity of the excavation, where water may be required to control dust emissions.

C. The Engineer will also be monitoring the site for elevated levels of dusts. In the event that visible emissions are observed, or levels are measured in excess of 200 µg per cubic meter, the Engineer may direct the contractor to take appropriate measures to mitigate the condition. Failure of the Contractor to implement measures that reduce dust levels below 200 µg per cubic meter may be caused for suspension of the Work, until otherwise directed by the Engineer.

3.05 EXCAVATON OF WASTES AND SOIL

A. Sediment and soil shall be excavated to the horizontal limits indicated on the drawings and to the depth(s) as directed by the Engineer.

B. Dewatering shall be performed to the extent necessary to excavate the wastes and soil and provide for the placement of graded fill and/or common borrow.

C. All excavation operations shall be conducted in a manner suitable for removal of wastes and contaminated soil without cross contamination of "clean" soil.

3.06 TEMPORARY ON-SITE SOIL STOCKPILING

A. If directed by the Engineer, "suspect" characteristically different excavated material shall be stockpiled out of the immediate work area and in a location acceptable by Owner, on 20-mil polyethylene sheeting. All stockpiled soils shall be covered with 20-mil polyethylene sheeting at the end of every working day. Sheeting shall be properly secured and maintained such that it remains fully intact during all weather conditions.

B. The Contractor shall segregate the soils into separate stockpile areas to facilitate separate characterization by Engineer, and subsequent off-site management.

C. The Contractor shall take care to segregate apparently uncontaminated or lightly contaminated materials from wastes and other overtly contaminated materials, as directed by Engineer. It will be the responsibility of the Engineer to decide what portion of the excavated materials may be suitable for on-site reuse.

D. All stockpiled soil shall be either reused on site or transported from the site as soon as possible. In no event shall the volume of on-site stockpiled soil exceed 500 cubic yards, without the specific approval of Engineer.

3.07 OFF-SITE MANAGEMENT OF EXCAVATED WASTES, SOIL AND INVESTIGATION DERIVED WASTE (IDW)

A. The Contractor shall be responsible for the off-site transportation and disposal of all soil designated by the Engineer for off-site management. In addition, all investigation derived waste (IDW) generated from in-situ pre-characterization of the site and otherwise generated over the course of the project, shall be disposed of at the facility approved by Engineer.

B. All soil and IDW requiring off-site disposal shall be properly disposed off-site at appropriately permitted landfill or disposal facility(ies) in good standing and holding current, valid permits and licenses in accordance with all federal, state, and local laws, regulations, ordinances, and procedures. The Contractor shall be responsible for identification and selection of the disposal facility (ies) for approval by the Engineer.

C. The Engineer will be responsible for all additional sampling and analyses as may be required by the receiving disposal facility (ies) for off-site disposal of soil and IDW. However, **it is the Contractor's responsibility to identify any additional receiving facility requirements that have not been met by the analytical results summary provided in these documents, including all subsequent environmental data provided by the Engineer.**

D. The Contractor shall contain all soil and IDW in DOT-approved containers and/or transport in DOT-approved vehicles. All containers or transport vehicles shall be provided with appropriately sized polyethylene bladder bags and/or polyethylene liners that can be secured by duct tape or other appropriate means, to the satisfaction of the Engineer, prior to leaving the site. In addition, all loose soil, dusts and other deleterious materials shall be rinsed from the all containers and transport vehicles at the decontamination area, after loading and prior to leaving the site.

E. All vehicles used for transportation of soil and IDW shall be properly labeled and placarded, as required for off-site transportation for conformance with all federal, state, and local laws, regulations, ordinances, and procedures.

F. The Contractor shall be responsible for coordination of all transporter and receiving facility activities. Transporter vehicles used for the transportation of soil and IDW shall be covered, substance compatible, licensed, insured, and permitted pursuant to federal, state, and local laws, regulations, ordinances, and procedures.

G. All vehicles departing the site shall be properly logged to show the vehicle identification, driver's name, time of departure, destination, and approximate volume and content of material carried. Location from which the wastes/soil originated will be provided by the Engineer for inclusion on the shipping documentation.

H. No materials shall leave the site until the designated receiving facility has agreed in writing to accept the type and quantity of waste/soil to be shipped.

I. The Contractor shall complete all required manifests and other pertinent forms for proper transportation and disposal. The Engineer shall review and the City will sign all manifests.

Signatures from the receiving location of all materials transported off-site are required. The Contractor shall be held accountable for ensuring that all requirements of the transporter and receiving disposal facility (ies) and federal, state, and local laws, regulations, ordinances, and procedures are complied with and properly documented.

J. Documentation shall be maintained indicating that all applicable laws have been satisfied and that all soil and IDW has been successfully transported and received at the disposal facility (ies).

K. Actual quantities which are subject to unit rates and measurements in the field shall be tabulated by the Contractor and verified by Engineer on a daily basis. The Contractor will not be reimbursed for unit rate work performed without the prior approval of quantities by Engineer.

3.08 SITE CLEANUP

A. During the course of the Work, the Contractor shall keep the Site and his operations clean and neat at all times. The Contractor shall dispose of all residue resulting from the site clearing operations; and at the conclusion for the day's Work, he shall remove and haul away any surplus materials, lumber, equipment, temporary structures, and any other refuse remaining from the site clearing operations and shall leave the entire site in a neat and orderly condition.

END OF SECTION

Appendix C4

Sedimentation and Erosion Control

SECTION 02270

SEDIMENTATION AND EROSION CONTROL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Bidding requirements, Contract Forms, General and Supplementary Conditions and Division I, General Requirements are hereby made a part of this Section. The Order of Conditions, File No. ____ issued by the New Bedford Conservation Commission is included in this contract and attached to this Section.

1.02 DESCRIPTION OF WORK

A. Furnish all labor, materials, equipment and incidentals necessary to perform all installation, maintenance, removal and area cleanup related to sedimentation control work as shown on the Drawings and as specified herein. The work shall include, but not necessarily be limited to; installation of temporary diversion swales, silt/hay bale fences, temporary slope drains, sediment removal and disposal, device maintenance, removal of temporary devices and final clean up.

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Carefully examine all of the Contract Documents for requirements which affect the work of this section.

B. Other specifications sections, which directly relate to the work of this section include, but are not limited to, the following:

1. Excavation and Management of Wetland Sediment
2. Section 02100 - Site Preparation
3. Section 02200 – Earthwork

1.04 REFERENCE SPECIFICATIONS

A. ASTM - American Society for Testing and Materials.

B. AASHTO - American Association of State Highway and Transportation Officials.

C. SSHB - Standard Specifications for Highways and Bridges, the Commonwealth of Massachusetts, Massachusetts Highway Department, latest edition.

1.04 PERFORMANCE REQUIREMENTS

A. The Contractor shall be responsible for the timely installation and maintenance of all sedimentation control and dewatering devices necessary to prevent the movement of sediment from the construction site to off site areas or into wetlands, or other drainage systems. Measures in addition to those shown on the Drawings necessary to prevent the movement of sediment off site shall be installed, maintained, removed and cleaned up at the expense of the Contractor. No additional charges to the owner shall be considered.

B. Sedimentation and erosion control measures shall conform to the requirements outlined in the forthcoming New Bedford Conservation Commission's Order of Conditions.

PART 2 - MATERIALS

2.01 SILT FENCE

A. Steel posts shall be a minimum of five feet (5') in length, two and one-half inch by two and one-half inch by one-quarter inch (2-1/2" x 2-1/2" x 1/4") angle post with self-fastening tabs and a five inch by four inch (5" x 4") (nominal) steel anchor plate at bottom.

B. Welded wire fabric shall be four inch by four inch (4" x 4") mesh of twelve (12) gauge by twelve (12) gauge steel wire.

C. Silt fence fabric shall be a woven, polypropylene, ultraviolet resistant material such as Mirafi 100X as manufactured by Mirafi, Inc., Charlotte, North Carolina or approved equal.

D. Tie wires for securing silt fence fabric to wire mesh shall be light gauge metal clips (hog rings), or one-thirty second inch (1/32") diameter soft aluminum wire.

E. Prefabricated commercial silt fence may be substituted for built-in-field fence. Prefabricated silt fence shall be "Envirofence" as manufactured by Celanese Corp., Charlotte, North Carolina, or approved equal.

2.02 EROSION CONTROL MAT

A. During the period between the completion of excavation and backfilling, Jute erosion mat shall be placed on all sloped surfaces and in all low-lying areas subject to erosion due to runoff. Use jute mat made of unbleached, undyed, and loosely-twisted yarn. The unit yarn weight shall be from 0.90 to 1.50 lb/yd² (488 to 814 g/m²). A 48 in (1.2 m) width shall show between 76 and 80 warpings, and a 36 in (900 mm) length shall show between 39 and 43 weftings.

B. The Erosion Control Blanket shall be placed in intimate contact with the soils without wrinkles or folds and anchored on a smooth graded surface approved by the Engineer. The Erosion Control Blanket shall be placed in such a manner that placement of the overlying materials will not excessively stretch so as to tear the Erosion Control Blanket. Anchoring of the terminal ends of the Erosion Control Blanket shall be accomplished through the use of key trenches or aprons at the crest and toe of the slope.

C. The Erosion Control Blanket shall be placed with the machine direction parallel to the slope. For streambank and channel protection the Erosion Control Blanket shall be placed with the machine direction parallel to the direction of water flow and perpendicular to wave action. Adjacent Erosion Control Blankets shall be joined by overlapping and anchoring. Overlapped seams of roll ends shall be a minimum of (1.5 ft.) except where placed under water. In such instances the overlap shall be a minimum of (2.5 ft). Overlaps of adjacent rolls shall be a minimum of (3 in) in all instances.

D. When overlapping, successive sheets, the Erosion Control Blankets shall be overlapped upstream over downstream, and/or upslope over downslope. In areas subject to high winds, Erosion Control Blankets shall be overlapped upwind over downwind and/or upslope over downslope.

E. Care shall be taken during installation so as to avoid damage occurring to the Erosion Control Blankets as a result of the installation process. Should the Erosion Control Blankets be damaged during installation, a material patch shall be placed over the damaged area extending (3.0 ft) beyond the perimeter of the damage.

G. Anchoring:

1. U-shaped wire staples, metal geotextile stake pins, or triangular wooden stakes can be used to anchor mats to the ground surface. Wire staples should be a minimum of 11 gauge. Metal stake pins should be 3/16 inch (4.8 mm) diameter steel with a 1 1/2 inch (38.1 mm) steel washer at the head of the pin. Wire staples and metal stakes should be driven flush to the soil surface. All anchors should

be 6-8 inches (0.2-0.5 m) long and have sufficient ground penetration to resist pullout. Longer anchors may be required for loose soils.

2. Blankets shall be stapled sufficiently to anchor blanket and maintain intimate contact with the soil. Staples shall be placed down the center and staggered with the staples placed along the edges. Slopes 2:1or greater require 2 staples per square yard. Moderate slopes, 2:1 to 3:1, require 1-2 staples per square yard (1 staple 3' o.c.). Gentle slopes require 1 staple per square yard.

H. Field monitoring shall be performed to verify that the placement does not damage the Erosion Control Blankets.

I. Any Erosion Control Blankets damaged during placement shall be replaced as directed by the Engineer, at the contractor's expense.

2.03 HAY BALES

A. Hay bales shall be bailed hay using two (2)-wrapping wires.

2.04 HAY BALE STAKES

A. Wood stakes for hay bales shall be two-inch (2") square by thirty-two inches (32") long, hardwood stakes.

PART 3 - EXECUTION

3.01 SILT FENCE AND HAY BALE INSTALLATION

A. Silt fences and hay bales shall be positioned as indicated on the Drawings and as necessary to prevent off site movement of sediment produced by construction activities as directed by the Architect and as shown on the Drawings.

B. Dig trench approximately six inches (6") wide and six inches (6") deep along proposed fence lines.

C. Drive hardwood stakes, eight feet (8') on center (maximum) at back edge of trenches. Stakes shall be driven two feet (2') (minimum) into ground.

D. Hang four by four (4 x 4) woven wire mesh on posts, setting bottom of wire in bottom of trench. Secure wire to posts with self-fastening tabs.

E. Hang filter fabric on wire carrying to bottom of trench with about four inches (4") of fabric laid across bottom of trench. Stretch fabric fairly taut along fence length and secure with tie wires eighteen inches (18") on center both ways.

F. Backfill trench with excavated material and tamp.

G. Install a double row of hay bales in staggered formation, and stake with two (2) hardwood stakes per bale.

H. Furnish, place and maintain silt fence and hay bales as specified and as shown on the Drawings. Remove after final inspection by Conservation Commission and with approval of Engineer.

3.02 MAINTENANCE AND INSPECTIONS

A. Inspections:

1. Contractor shall make a visual inspection of all sedimentation control devices once per week and promptly after every rainstorm. If such inspection reveals that additional measures are needed to prevent movement of sediment to off site areas the Contractor shall promptly install additional devices as needed. Sediment controls in need of maintenance shall be repaired promptly. Maintain stockpiles on site of siltation fence, hay bales, straw mat, and repair kits.

B. Maintenance:

1. Silt Fences and Hay Bales:

a. Remove accumulated sediment once it builds up to one-half (1/2) of the height of the haybale.

b. Replace damaged fabric, or patch with a two-foot (2') minimum overlap.

c. Make other repairs as necessary to ensure that the fence is filtering all runoff directed to the fence.

d. Replace hay bales when saturated with silt or otherwise damaged.

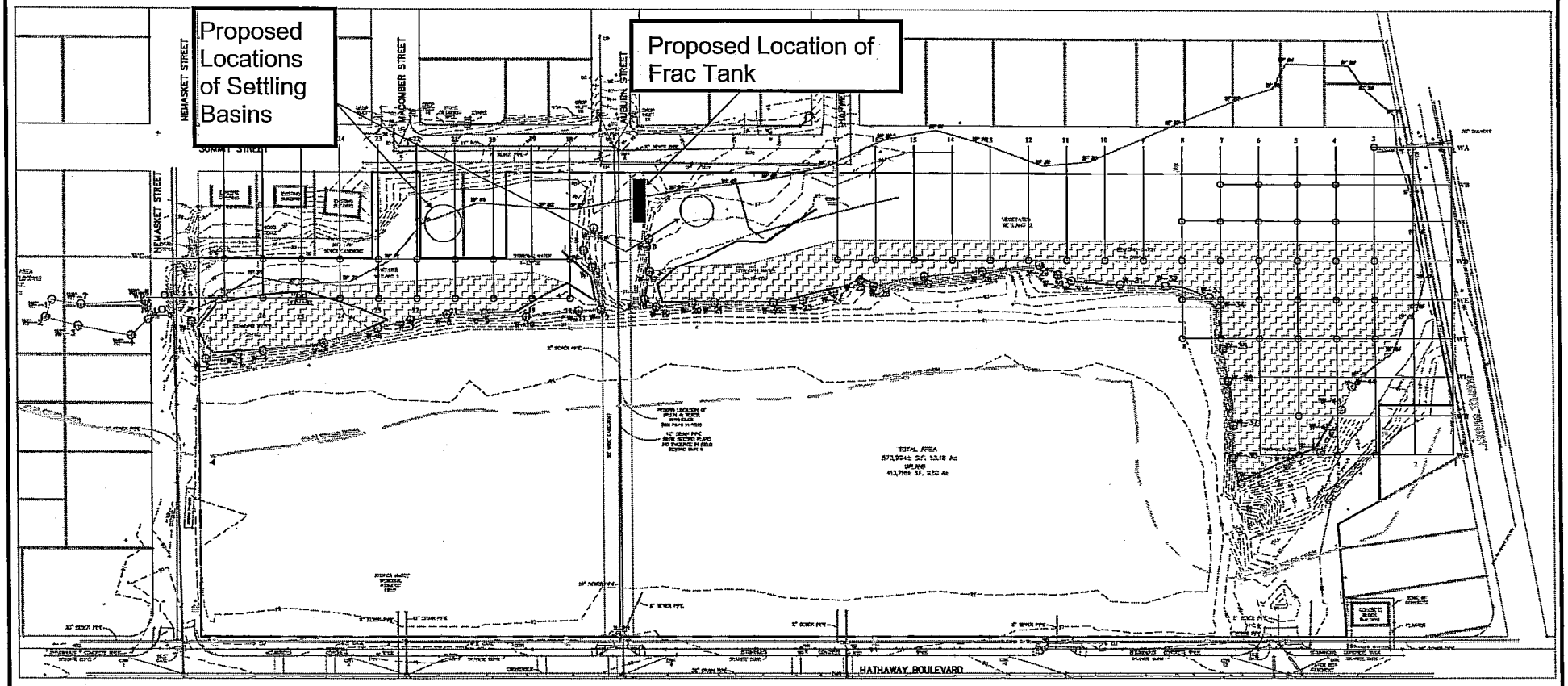
3.05 REMOVAL AND FINAL CLEANUP

A. Once the site has been fully stabilized against erosion (approximately one full growing season) and after authorization by Engineer, remove sediment control devices and all accumulated silt. Dispose of silt and waste materials in proper manner. Regrade all areas disturbed during this process and stabilize against erosion with surfacing materials and erosion control devices as directed by the Architect until vegetation has sufficiently developed.

END OF SECTION

Appendix D

Dewatering



Indicates approximate limits of areas to be cleared and PCB-impacted sediments to be removed (PCB concentrations > 1 ppm)

B E T A Group, Inc.
Engineers · Scientists · Planners

315 Norwood Park South
Norwood, MA 02062 781.255.1982
email: BETA@BETA-inc.com

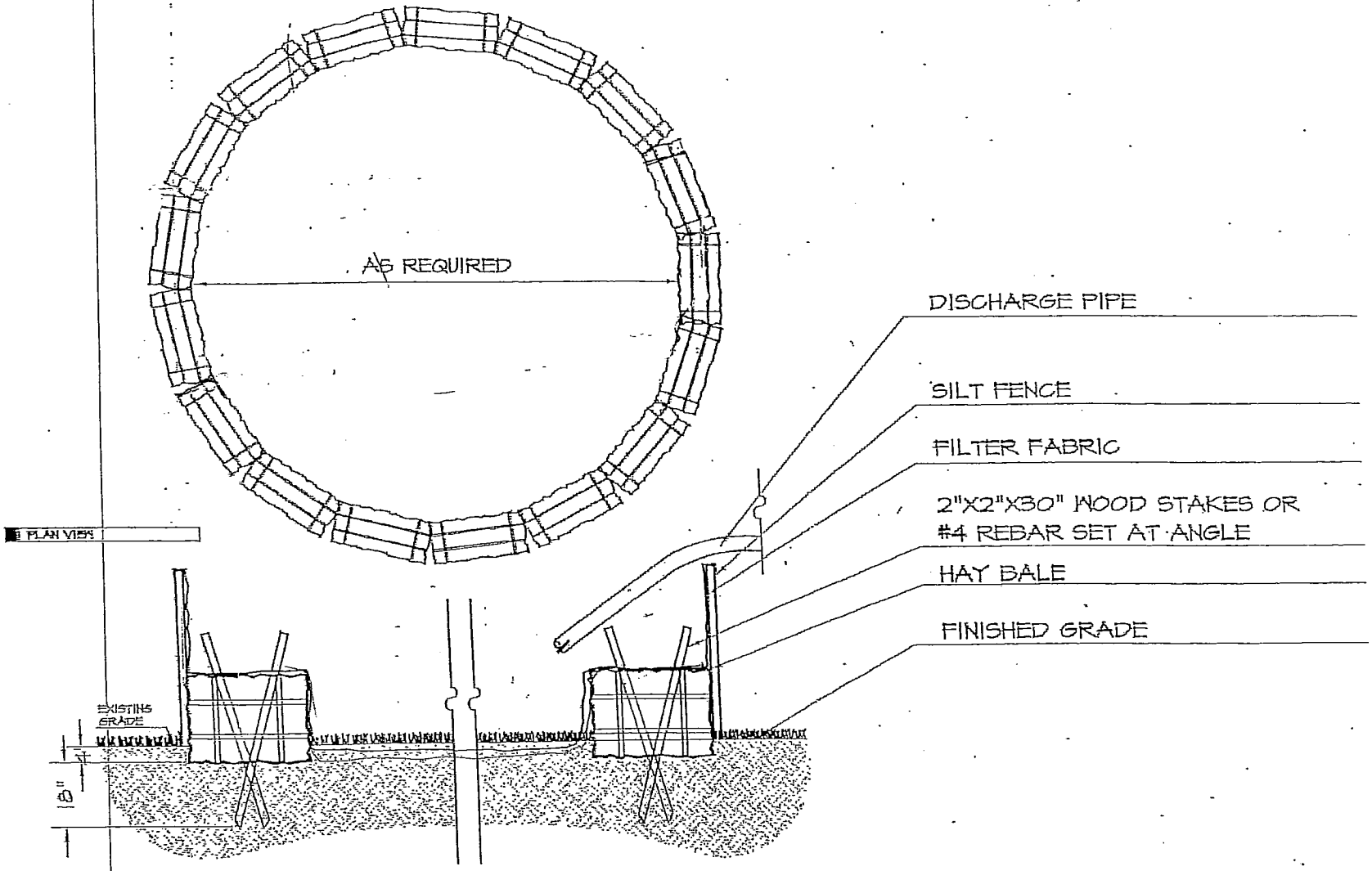
McCoy Field/New Keith Middle School

New Bedford, MA

Scale: 1" = 100'

Wetlands Sediment Remediation Areas

April 29, 2005



PLAN VIEW

PERIMETER CONTROL SECTION

5 SETTLING BASIN

L-3 SCALE: N.T.S.

NPDES PERMIT EXCLUSION APPLICATION - INCIDENT NOTIFICATION REPORT

U.S. EPA - Region I, One Congress Street, Suite 1100 (HBR), BOSTON, MA 02114

HBR CASE NO.

NPDES Exclusion Ref.#

Received: / / Military Time: GRANTED BY:

A) REPORTER INFO.

Requested by: Alan D. Hansrom, P.E, LSP
Organization Name: BETA Group, Inc.
Address: 315 Norwood Park South fax: 781-255-1974
City: Norwood County: Norfolk State: MA
Zip: 02062 Phone No. (781) 255-1982 Ext: 1116

B) DISCHARGER/ PERMITTEE/ OWNER

Same As Above in A Name/Company Name: City of New Bedford School Department
Address: 455 County St Room 141 Contact: Lawrence Oliveira
City: New Bedford County: Bristol State: MA
Zip: 02740 Phone No. (508) 997-4511 Ext: 3258

C) DISCHARGE INCIDENT LOCATION

Same As Above in B Site Location Name: McCoy Field (site for New Keith Middle School)
Address: Field is bound by Hathaway Blvd, Summit St, and Durfee St.
City: New Bedford County: Bristol State: MA
Zip: 02740 Phone No. ( ) Ext:

D) DATES

Discharge Start Date: April 14, 2004 Discharge Duration: May 31, 2004

E) GROUND WATER CONT.

	Contaminant 1	Contaminant 2	Contaminant 3
	Barium	Toluene	Vanadium
Approx. Concentration	~~140~~ ug/L	1.8 ug/L	10. ug/L

	Contaminant 4	Contaminant 5	Contaminant 6
Approx. Concentration			

F) TREATMENT SYSTEM

Treatment Equipment: (check applicable)

- (Frac Tank) 20,000-gal
- (GAC Filter)
- Equalization Tanks:
- Airstripper
- Bag Filter
- Other => Describe:
- Oil/Water Separator

Written Description of System: Groundwater will be pumped from the excavation to a frac tank for solids settling prior to discharge to a temporary settling basin. Water quality will be monitored and a GAC filter will be used if necessary.

G) RECEIVING WATERS

Discharge VIA: (check applicable)

- Direct
- Storm Drain
- (Wetlands)
- Unnamed River/Brook
- Overland Unknown
- Within Facility
- (Other =>) Describe: settling basin

Receiving Waterway Name:

H) PURPOSE OF DISCHARGE

Dewatering Activity: (check applicable)

- UST Replacement/Removal
- (Contaminated Excavation)
- Pump Test
- Recovery & Treatment
- Other => Describe

Description: A clean corridor will be excavated for relocation of subsurface utilities.

I) FLOW

Maximum Flow Rate: N/A GPM water will be discharged to settling basin

J) INFO

Site ID #: 4-15685
Agency Name: MA DEP BWSC Contact: Gerard M.R. Martin
Agency Name: MA DEP Wetlands Contact: Brenda Harper

Revised 01/05/99

New Bedford Con Comm – Sarah Porter, Agent

New Bedford School System-McCoy Field
Results of Groundwater Analysis
Samples Collected October 31, 2002

Parameter	Method 1 Groundwater Standards		Sample Location			
	GW-3	Units	TB/OW-22	TB/OW-2	TB/OW-1B	TB/OW-6
Total Metals						
Antimony, Total	300	ug/l	ND	ND	ND	ND
Arsenic, Total	400	ug/l	ND	ND	ND	ND
Barium, Total	30000	ug/l	260	70	140	1300
Beryllium, Total	50	ug/l	ND	ND	ND	ND
Cadmium, Total	10	ug/l	ND	ND	ND	ND
Chromium, Total	2000	ug/l	ND	ND	ND	ND
Lead, Total	30	ug/l	ND	ND	ND	ND
Nickel, Total	80	ug/l	ND	ND	ND	ND
Selenium, Total	60	ug/l	ND	ND	ND	ND
Silver, Total	7	ug/l	ND	ND	ND	ND
Thallium, Total	400	ug/l	ND	ND	ND	ND
Vanadium, Total	2000	ug/l	ND	ND	10	ND
Zinc, Total	900	ug/l	ND	ND	ND	ND
Volatile Organic Compounds (VOCs)-8260						
Benzene	7000	ug/l	ND	ND	ND	0.76
Toluene	50000	ug/l	1.7	1.8	1.4	1.9
Ethylbenzene	4000	ug/l	ND	ND	ND	ND
Vinyl chloride	40000	ug/l	ND	ND	ND	ND
Methyl tert butyl ether	50000	ug/l	1.1	ND	ND	ND
Total Xylenes	50000	ug/l	ND	ND	ND	ND
Hexachlorobutadiene	90	ug/l	ND	ND	ND	ND
Naphthalene	6000	ug/l	2.5	ND	ND	6.5
Semi-Volatile Organic Compounds (SVOCs)-8270						
Hexachlorobenzene	40	ug/l	ND	ND	ND	ND
1,4-Dichlorobenzene	6000	ug/l	ND	ND	ND	ND
Hexachlorobutadiene	90	ug/l	ND	ND	ND	ND
Benzo(a)anthracene	3000	ug/l	ND	ND	ND	ND
Benzo(a)pyrene	3000	ug/l	ND	ND	ND	ND
Benzo(b)fluoranthene	3000	ug/l	ND	ND	ND	ND
Benzo(k)fluoranthene	3000	ug/l	ND	ND	ND	ND
Chrysene	3000	ug/l	ND	ND	ND	ND
Dibenzo(a,h)anthracene	3000	ug/l	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	3000	ug/l	ND	ND	ND	ND
Pentachlorophenol	80	ug/l	ND	ND	ND	ND
Polycyclic Aromatic Hydrocarbons (PAHs)-8270M						
Acenaphthene	5000	ug/l	ND	ND	ND	ND
Fluoranthene	200	ug/l	ND	ND	ND	ND
Naphthalene	6000	ug/l	ND	ND	ND	3.6
Benzo(a)anthracene	3000	ug/l	ND	ND	ND	ND
Benzo(a)pyrene	3000	ug/l	ND	ND	ND	ND
Benzo(b)fluoranthene	3000	ug/l	ND	ND	ND	ND
Benzo(k)fluoranthene	3000	ug/l	ND	ND	ND	ND
Chrysene	3000	ug/l	ND	ND	ND	ND
Acenaphthylene	3000	ug/l	ND	ND	ND	ND
Anthracene	3000	ug/l	ND	ND	ND	ND
Benzo(ghi)perylene	3000	ug/l	ND	ND	ND	ND
Fluorene	3000	ug/l	ND	ND	ND	ND
Phenanthrene	50	ug/l	ND	ND	ND	ND
Dibenzo(a,h)anthracene	3000	ug/l	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	3000	ug/l	ND	ND	ND	ND
Pyrene	3000	ug/l	ND	ND	ND	ND
2-Methylnaphthalene	3000	ug/l	ND	ND	ND	ND
Polychlorinated Biphenyls (PCBs)						
Aroclor 1221	0.3	ug/l	ND	ND*	ND*	ND
Aroclor 1232	0.3	ug/l	ND	ND*	ND*	ND
Aroclor 1242/1016	0.3	ug/l	ND	ND*	ND*	ND
Aroclor 1248	0.3	ug/l	ND	ND*	ND*	ND
Aroclor 1254	0.3	ug/l	ND	ND*	ND*	ND
Aroclor 1260	0.3	ug/l	ND	ND*	ND*	ND
Extractable Petroleum Hydrocarbons (EPH)						
C9-C18 Aliphatics	20000	ug/l	ND	ND	ND	ND
C19-C36 Aliphatics	20000	ug/l	ND	ND	ND	ND
C11-C22 Aromatics, Unadjusted	30000	ug/l	ND	ND	ND	ND

ND-not detected.
ND*-not detected, but the laboratory minimum detection limit (MDL) was above Method 1 Standards.

This Form Replaces Form 3510-9 (6-98)
Refer to the Following Pages for Instructions

Form Approved OMB Nos. 2040-0188 and 2040-0211

NPDES Form

United States Environmental Protection Agency
Washington, DC 20460

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

Submission of this Notice of Intent (NOI) constitutes notice that the party identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the party identified in Section II of this form meets the eligibility requirements of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Refer to the instructions at the end of this form.

I. Permit Number

MAR100000

II. Operator Information

Name: WES CONSTRUCTION CORPORATION

IRS Employer Identification Number (EIN): 04 - 2077178

Mailing Address:

Street: 175 COMMERCIAL CIRCLE

City: DEDHAM State: MA Zip Code: 02026 -

Phone: 781 - 326 - 4030 Fax (optional): 781 - 326 - 9957

E-mail (optional): WESGC@VERIZON.NET

III. Project/Site Information

Project/Site Name: KEITH MIDDLE SCHOOL

Project Street/Location: 225 HATHAWAY BOULEVARD

City: NEW BEDFORD State: MA Zip Code: 02740 -

County or similar government subdivision: BRISTOL

Latitude/Longitude (Use one of three possible formats, and specify method)

Latitude
1. 41° 38' 43" N (degrees, minutes, seconds)
2. ___° ___' ___" N (degrees, minutes, decimal)
3. 41.6454° N (decimal)

Longitude
1. 070° 56' 56" W (degrees, minutes, seconds)
2. ___° ___' ___" W (degrees, minutes, decimal)
3. -70.9488° W (decimal)

Method: ☐ U.S.G.S. topographic map ☐ EPA web site ☐ GPS ☑ Other: GEOSEARCH.COM

• If you used a U.S.G.S. topographic map, what was the scale: _____

Project Located in Indian country? ☐ Yes ☑ No

If so, name of Reservation or if not part of a Reservation, put "Not Applicable": _____

Estimated Project Start Date: 09 (Month) / 20 (Date) / 2004 (Year)

Estimated Project Completion Date: 12 (Month) / 30 (Date) / 2004 (Year)

Estimated Area to be Disturbed (to the nearest quarter acre): 0007.50 / .5

IV. SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI? ☑ Yes ☐ No

Location of SWPPP for viewing: ☐ Address in Section II ☐ Address in Section III ☑ Other

If Other:

SWPPP Street: 315 NORWOOD PARK SOUTH

City: NORWOOD

State: MA Zip Code: 02062 -

SWPPP Contact Information (If different than that in Section II):

Name: ALAN HANSCOM, PE, LSP

Phone: 781 - 255 - 1982 Fax (optional): 781 - 255 - 1974

E-mail (optional): AHANSCOM@BETA-INC.COM

V. Discharge Information

Identify the name(s) of waterbodies to which you discharge. UNNAMED TRIBUTARY TO THE APPONAGANSETT SWAMP.

Is this discharge consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s)?

☑ Yes ☐ No

VI. Endangered Species Information

Under which criterion of the permit have you satisfied your ESA eligibility obligations?

☑ A ☐ B ☐ C ☐ D ☐ E ☐ F

- If you select criterion F, provide permit tracking number of operator under which you are certifying eligibility:

VII. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: ALAN D. HANSCOM, P.E., LSP

Print Title: ASSOCIATE

Signature:

Date: 9/15/2004

Instructions for Completing EPA Form 3510-9

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form | This Form Replaces Form 3510-9 (8/98) | Form Approved OMB Nos. 2040-0188 and 2040-0211

Who Must File an NOI Form

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et.seq.; the Act), federal law prohibits storm water discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) Permit. Operator(s) of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. If you have questions about whether you need an NPDES storm water permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to *www.epa.gov/npdes/stormwater/cgp* or telephone the Storm Water Notice Processing Center at (866) 352-7755.

Where to File NOI Form

See the applicable CGP for information on where to send your completed NOI form.

Completing the Form

Obtain and read a copy of the appropriate EPA Storm Water Construction General Permit for your area. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to *www.epa.gov/npdes/stormwater/cgp* or telephone the Storm Water Notice Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

Section I. Permit Number

Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

Section II. Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager. Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address (if you would like to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

Section III. Project/Site Information

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility either in degrees, minutes, seconds; degrees, minutes, decimal; or decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to *www.epa.gov/npdes/stormwater/cgp* for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used.

Indicate whether the project is in Indian country, and if so, provide the name of the Reservation. If the project is in Indian Country Lands that are not part of a Reservation, indicate "not applicable" in the space provided.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/1998). Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest quarter acre. Note: 1 acre = 43,560 sq. ft.

Section IV. SWPPP Information

Indicate whether or not the SWPPP was prepared in advance of filing the NOI form. Check the appropriate box for the location where the SWPPP may be viewed. Provide the name,

Instructions for Completing EPA Form 3510-9

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form | This Form Replaces Form 3510-9 (8/98) | Form Approved OMB Nos. 2040-0188 and 2040-0211

fax number (optional), and e-mail address (optional) of the contact person if different than that listed in Section II of the NOI form.

Section V. Discharge Information

Enter the name(s) of receiving waterbodies to which the project's storm water will discharge. These should be the first bodies of water that the discharge will reach. (Note: If you discharge to more than one waterbody, please indicate all such waters in the space provided and attach a separate sheet if necessary.) For example, if the discharge leaves your site and travels through a roadside swale or a storm sewer and then enters a stream that flows to a river, the stream would be the receiving waterbody. Waters of the U.S. include lakes, streams, creeks, rivers, wetlands, impoundments, estuaries, bays, oceans, and other surface bodies of water within the confines of the U.S. and U.S. coastal waters. Waters of the U.S. do not include man-made structures created solely for the purpose of wastewater treatment. U.S. Geological Survey topographical maps may be used to make this determination. If the map does not provide a name, use a format such as "unnamed tributary to Cross Creek". If you discharge into a municipal separate storm sewer system (MS4), you must identify the waterbody into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4.

Indicate whether your storm water discharges from construction activities will be consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s). To answer this question, refer to *www.epa.gov/npdes/stormwater/cgp* for state- and regional-specific TMDL information related to the construction general permit. You may also have to contact your EPA regional office or state agency. If there are no applicable TMDLs or no related requirements, please check the "yes" box in the NOI form.

Section VI. Endangered Species Information

Indicate for which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species, and designated critical habitat. See Part 1.3.C.6 and Appendix C of the permit. If you select criterion F, provide the permit tracking number of the operator under which you are certifying eligibility. The permit tracking number is the number assigned to the operator by the Storm Water Notice Processing Center after EPA acceptance of a complete NOI.

Section VII. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name and title of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection, Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

Appendix E

Stormwater Pollution Prevention Plan

KEITH MIDDLE SCHOOL
CONSTRUCTION POLLUTION PREVENTION PLAN

SITE DESCRIPTION			
Project Name and Location; (Latitude, Longitude, or Address	Keith Middle School 225 Hathaway Blvd. New Bedford, MA 02740	Owner Name and Address:	New Bedford Public Schools 455 County Road New Bedford, MA 02740-5194
Project Description: (Purpose and Types of Soil Disturbing Activities)	Phase II of this project will consist of earthwork for site remediation, preparation for site utilities and pile driving. Phase III will consist of site development and building construction.		
Soil disturbing activities will include: Phase II - Stripping topsoil, removal and replacement of fill layer and regulated soils with clean granular fill (to a depth of 3 feet below proposed finished grade in lawn and landscape areas and 4 feet below proposed finished grade under all paved areas), installation of miscellaneous bases, concrete filled steel bollards, underground utilities including water, sewer and drainage systems, and steel piles for building support. Phase III – Construction of new Middle School building, installation of underground electric and gas services and light poles, paving of drives, parking areas and walkways, construction of permanent fencing, and installation of loam, lawns, planting and irrigation.			
Site Area:	The site is approximately 8.65 acres.		
Sequence of Major Activities			
The order of activities will be as follows: See Attachment C.			
Name of Receiving Waters:	The entire site drains to the adjacent Unnamed Wetland and eventually flows into the Appongansett Swamp, which is approximately one mile NW of the site (see Attachment G).		

CONTROLS

Erosion and Sediment Controls are already in place.

Stabilization Practices

Temporary Stabilization - Topsoil stockpiles and disturbed portions of the site where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area. The temporary seed shall be Rye (grain) applied at the rate of 50 pounds per 1000 sq. ft. After seeding, each area shall be mulched with straw.

Permanent Stabilization - Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity. The permanent seed mix shall be as specified in the construction documents or as directed by the Conservation Commission.

Material stockpiles will be encompassed by plastic poly sheeting to contain any sediment from washing away from the area.

All work will be completed in accordance with the Conservation Commission's Order of Conditions DEP file No. SE49-461

Storm Water Management

Storm water drainage will be provided by closed drainage system consisting of catch basins, manholes and two detention basins for the developed areas. The areas which are not developed will have permanent seeding or plantings.

The new drainage system was designed in accordance with the DEP Stormwater Management Policy that requires a minimum treatment efficiency of 80% removal for TSS.

OTHER CONTROLS

Waste Disposal:

Waste Materials
All waste materials will be collected and stored in a metal dumpster rented from the ABC Disposal, which is a licensed solid waste management company in New Bedford, MA. The dumpster wilt meet all local Town and any State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as needed, and the trash will be hauled off site. No construction waste materials will be buried onsite. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer and Mr. Adams, the individual who manages the day-to-day site operations, will be responsible for seeing that these procedures are followed.

Hazardous Waste
All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices and Mr. Michael Adams of Wes Construction, the site health and safety officer and the individual who manages day-to-day site operations, will be responsible for seeing that these practices are followed.

Sanitary Waste
All sanitary waste will be collected from the portable units a minimum of once a week by the Bay-state Portable Restroom, a licensed sanitary waste management contractor, as required by local regulation.

Offsite Vehicle Tracking:

A stabilized construction entrance has been provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept daily to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be lined with waterproof plastic poly sheeting, covered with a tarpaulin and washed down before leaving the site. Additionally, weekly inspections of the stabilized construction entrance and road will be performed and logged (see Attachment A).

The road at the construction entrance is at a lower elevation than the site. During Phase I activities, seepage of vehicle wash-water onto the road occurred where the driveway meets the road. The wash-water found a conduit by moving laterally through the topsoil towards the road. A four foot deep trench was installed across the entrance to the driveway and filled with crushed stone to prevent future lateral movement of wash-water onto the road by enabling it to drain downwards into the ground. Since the installation of the trench, no seepage has occurred.

TIMING OF CONTROLS/MEASURES

As indicated in Attachment C - Intended Sequence of Site Activities, as part of Phase I activities, the hay bales and erosion control fence and stabilized construction entrance have already been constructed. Also, the perimeter slopes along the wetland boundary have been graded and stabilized with permanent seed and grass. Additionally, as part of Phase II activities, hay bails and erosion control fence will be constructed the remaining perimeter of the site.

Areas where construction activity temporarily ceases for more than 21 days will be stabilized with temporary seed and mulch within 14 days of the last disturbance. Once construction activity ceases permanently the area will be stabilized with permanent seed.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The City of New Bedford currently has no wetland bylaws for storm water management erosion and sediment control and is guided by the State regulations. The storm water pollution prevention plan reflects the State wetland regulations as stated in the Wetlands Protection Act 310 CMR 10.00. To ensure compliance, this plan was prepared in accordance with the Storm Water Management For Construction Activities, published by the United States Environmental Protection Agency. There are no other applicable State or Federal requirements for sediment and erosion site plans (or permits), or storm water management site plans (or permits).

MAINTENANCE/INSPECTION PROCEDURES

Erosion and Sediment Control Inspection and Maintenance Practices

Erosion and sediment controls have been installed along the portions of the perimeter of the site that border the wetlands. The slope has been graded, stabilized and seeded. Grass has taken and is helping to stabilize the slope and prevent erosion during storm events. The entire rest of the site is relatively level. Historically, during Phase I activities, runoff from stormwater events in these areas percolated into the ground.

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls.

- Less than one half of the site will be denuded at one time.
- All control measures will be inspected at least once each week and following any storm event of 0.5 inches or greater.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
- Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.
- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- Maintenance inspection reports will be made after each inspection of the Erosion Control Methods and the Site Stabilization Measures. Copies of the report forms to be completed by the inspector (see Attachment A).
- Mr. Adams, the site health and safety officer for Wes Construction Corp., will select three individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- Personnel selected for inspection and maintenance responsibilities will receive training from Mr. Adams. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

MAINTENANCE /INSPECTION PROCEDURES (Continued)

Non Storm-Water Discharges

It is expected that the following non-storm water discharges will occur from the site during the construction period:

- Contaminated groundwater (from dewatering excavation),
- Non-contaminated groundwater (from dewatering excavation).

All non-storm water discharges will be directed to the on-site storage tank to be discharged into the designated on-site, above-ground, stilling basin. The stilling basin is constructed of silt fabric and allows the water to percolate back into the ground while removing any suspended solids. Solids will be removed from the basin before the design capacity is reduced by 50 percent.

MATERIAL INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present onsite during construction:

- Concrete
- Steel Pilings
- Steel and PVC Pipe for Utilities
- Detergents
- Paints (enamel and latex)
- Metal Studs
- Concrete
- Tar
- Gravel
- Clean Sand for Fill
- Fertilizers
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Masonry Block
- Roofing Materials

SPILL PREVENTION

Material Management Practices

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff.

Good Housekeeping

The following good housekeeping practices will be followed onsite during the construction project

- An effort will be made to store only enough products required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of a product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials onsite.

Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials.

- Products will be kept in original containers unless they are not re-sealable
- Original labels and material safety data will be retained; they contain important product information
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

Product Specific Practices

The following product specific practices will be followed onsite:

Petroleum Products

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or State and local regulations.

Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.
- The Health and Safety Plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.
- Mr. Adams, the site health and safety officer responsible for the day-to-day site operations, will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer onsite.

POLLUTION PREVENTION PLAN CERTIFICATION

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed:_____
Alan D. Hanscom, P.E., LSP
Associate
BETA Group, Inc.

Date:_____

CONTRACTOR'S CERTIFICATION

I certify under the penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature	For	Responsible for
_____ Ken Vogel Senior Project Manager Date:_____	Wes Construction Corporation 175 Commercial Circle Dedham, MA 02026 (781) 326-4030	General Contractor

Appendix F

Site Photographs

PHOTOGRAPHIC DOCUMENTATION

McCoy Field

New Bedford, Massachusetts

NAA File P1372

Appendix G

Nover-Armstrong Memos

NOVER-ARMSTRONG ASSOCIATES, INC.
Carver Square Marketplace, 124 Main Street, Unit 2GG
Carver, Massachusetts 02330
Telephone 508.866.8383
Facsimile 508.866.9898

MEMORANDUM

TO: Alan Hanscom
BETA Group, Inc.

FROM: Lenore White, PWS

RE: McCoy Field
New Bedford, MA
NAA File P1372

DATE: 04/28/05

Pursuant to a review of the project scope for the above referenced project and relevant data gathered to date, Nover-Armstrong Associates, Inc. (NAA) has the following preliminary comments regarding the ecological impacts of the project and the preliminary restoration goals. It is our overall opinion that the proposed project will serve to improve the natural capacity of the resource area and a successful restoration can be accomplished.

The project is designed as a limited project, pursuant to 310 CMR 10. 53 (3) (q), for the "assessment, monitoring, containment, mitigation, and remediation of....hazardous material in accordance with the provisions of 310 CMR 40.00000." More specifically, the project is an undertaking by the City of New Bedford to significantly reduce the risk associated with the hazardous material at the site by excavating it and restoring the natural wetland community. As such, the work will improve the natural capacity of the resource area by providing a cleaner environmental for all endemic species. Although a Method 3 Risk Characterization of the Wetland Areas concludes that there is "**no significant risk of harm to human health, public welfare, safety and the environment**", the work is being conducted as an additional assurance for the City of New Bedford. The temporary disturbance will be conducted at a time when the area is sufficiently dry or frozen to reduce impacts caused by the compaction of equipment. Once all of the significantly contaminated areas have been excavated, the area will be restored and re-vegetated. Prior to any restoration, additional sampling will be conducted to ensure that the remaining areas are sufficiently hazard free.

A plan titled "Wetlands Sampling Grid" accompanies this Notice of Intent and shows the area of proposed work. An area of approximately 1.5 acres will be altered by this proposed project. According to the test results to date, the area of contamination is primarily limited to the base of the existing slope, where contamination has migrated off the slope and into the low, flat area of the wetlands. The area proposed for remediation encompasses this area, and an area of wetlands at the north end of the site.

Any areas where PCB concentrations exceed 1ppm are proposed for remediation. As shown in the attached photographs, the area is well established with wetland vegetation. Prior to any excavation work, I recommend that an erosion control barrier be installed between the work and any adjacent wetland areas. A double row of staked hay bales in staggered formation should be installed at the perimeter of the work area. In addition to protecting non-contaminated wetland areas, the barrier will serve to alert any equipment operators on the extent of the disturbance area. Once the area has been excavated and sampled, it is anticipated that re-vegetation efforts can commence. The goal of the restoration effort will be to restore the natural plant community so that the impacts of the proposed activity are minimized. To this end, I propose that the base of the slope be re-seeded with a Wetmix species, composed of seeds that will germinate and produce a permanent cover of grasses, forbs, wildflowers, legumes and grasses. This mix is especially suited to produce a no-maintenance cover and is appropriate cover for cut and fill slopes, flooded areas, and disturbed areas adjacent to commercial and residential areas. Should it be necessary to delay restoration because of adverse or unsuitable weather conditions, the area can be protected with a mulch or organic cover to protect against unexpected erosion until conditions for re-vegetation are more suitable. The area to the north can be supplemented with a matrix of trees and shrubs including red maple, highbush blueberry, viburnum species and winterberry as necessary to fully restore the area.

As mentioned previously, the project is proposed as a "limited project". As such, the issuing authority has the discretion to waive the performance standards. In the instant case, the project has been designed to meet the performance standards to the extent practical. Once the project is complete, it is expected that there will be no loss or impairment of the resource area. In the unlikely event that areas do not become primarily re-vegetated with wetland plant species, NAA can provide additional oversight and recommendations to improve the condition. The goals of reducing the contamination and attendant risks will be actualized. The temporary impacts to the resource area will be minimized with the use of erosion control barriers and mitigation in the form of restoration will be accomplished. In summary, NAA is of the opinion that the proposed work meets the State Wetlands Protection Act and regulations and will not result in any long-term ecological risks.

I will be available at the public meeting to address any additional concerns you may have. In the meantime, please do not hesitate to contact me.

NOVER-ARMSTRONG ASSOCIATES, INC.
Carver Square Marketplace, 124 Main Street, Unit 2GG
Carver, Massachusetts 02330
Telephone 508.866.8383
Facsimile 508.866.9898

MEMORANDUM

TO: Alan Hanscom, P.E., LSP
BETA Group, Inc.

FROM: Lenore White, PWS

RE: McCoy Field
New Bedford, MA
NAA File P1372

DATE: 05/12/05

Pursuant to an on-site inspection on May 11, 2005 at the above-referenced site, Nover-Armstrong Associates, Inc. (NAA) is submitting the following comments. This memo is meant to supplement an earlier memo to you dated April 28, 2005, for inclusion in the pending Notice of Intent application.

On May 11, 2005 I met with Ms. Sarah Porter of the New Bedford Conservation Commission and Ms. Dorian Boardman. The purpose of the site inspection was to review the delineation of the boundary of the bordering vegetated wetland (BVW), in preparation for the submittal of a Notice of Intent. Our site inspection focused primarily on the edge of the BVW along the west side of the subject site. Ms. Boardman flagged the BVW boundary on or about April 25, 2005. The determination is critical in this area because there are adjacent private properties that could be affected by the boundary determination.

The area is defined as a bordering vegetated wetland, pursuant to the definition found at 310 CMR 10.55. It borders on an open water body at the north end of the site. Although the USGS topographic map shows a stream within the wetland, there was no discernible channel evident on the day of the site inspection. A utility easement bisects the wetland but it remains hydraulically connected via an underground drainage channel. Vegetation within the wetland is a diverse community of mature forest species, punctuated by pockets of standing water and emergent herbaceous species. Predominant wetland vegetation includes red maple trees and saplings, high bush blueberry bushes, viburnum shrubs, and phragmites.

In general, the boundary flagged by Ms. Boardman was accurate. There were several areas of minor modification that were made on May 11 and agreed to by all parties. Areas that were modified included 4 to 5 flags at the southwest end of the work area and 3 flags at the far northwest end. Relocated flags in the southwest are now consistent with a previously established edge. In the area to the northwest, the flags were relocated to better represent the

predominance of hydro-phytic vegetation and lower elevations. These new flag locations will be surveyed and located on a revised plan to be submitted at a later date. It is important to note that the flags which were relocated are not within the area proposed to be altered.

During the course of the inspection, Ms. Porter and I also observed the wetland edge along the east side of the work area. The boundary of the wetland is clear in this area, as it is limited to the low, flat area at the toe of the slope. No changes were made to the BVW boundary on the east side. There was no evidence of erosion into the wetland observed on the day of the site inspection. The up-gradient slope has been re-vegetated with a seed mix that has become well established and the slope is stable. Standing water was observed in one area at the base of the slope, on the uplands side of the hay bale barrier. The standing water could be an indication that the wetland is somewhat more extensive in this area. If so, the erosion control measures (i.e. hay bales and siltation curtain) could be relocated on the up-gradient side to better protect this area from any unforeseen potential alterations.

I will be available at the public hearing to further discuss my observations and findings. In the meantime, please do not hesitate to contact me with any questions. Thank-you.

WETLAND RESTORATION DESIGN

McCoy Field
New Bedford, Massachusetts
NAA File P1372

NOVER-ARMSTRONG ASSOCIATES, INC.

124 Main Street, Unit 2GG
Carver, Massachusetts 02330

Telephone 508.866.8383
Facsimile 508.866.9898
www.noverarmstrong.com

WETLAND RESTORATION DESIGN

McCoy Field
New Bedford, Massachusetts
NAA File P1372

Prepared For:

Alan Hanscom, P.E., LSP
BETA Group, Inc.
315 Norwood Park South
Norwood, MA 02062

May 26, 2005

NOVER-ARMSTRONG ASSOCIATES, INC.

124 Main Street, Unit 2GG
Carver, Massachusetts 02330

Telephone 508.866.8383
Facsimile 508.866.9898
www.noverarmstrong.com

May 26, 2005

Alan Hanscom, P.E., LSP
BETA Group, Inc.
315 Norwood Park South
Norwood, MA 02062

Re: Wetland Restoration Design
McCoy Field
New Bedford, Massachusetts
NAA File P1372

Mr. Hanscom:

This narrative serves as a guidance document for the restoration of a wetland system proposed to be altered which totals approximately 1.5 acres. The wetland system will be **temporarily** altered by the proposed risk-based, clean-up and remediation of the wetlands immediately adjacent to the new Keith Middle School construction site. The project is filed as a limited project pursuant to 310 CMR 10.53 (3) (q) and this Design accompanies the Notice of Intent filed for the subject work.

Nover-Armstrong Associates, Inc. (NAA) believes that a successful wetland restoration is possible on this site. The single most important environmental variable for success is the occurrence of the groundwater at or near the surface for a substantial portion of the growing season. NAA recommends that the specific steps detailed in this narrative be taken to ensure the success of the wetland restoration effort.

Sincerely,
Nover-Armstrong Associates, Inc.

Lenore White

Lenore White
Professional Wetlands Scientist

Attachment

TABLE OF CONTENTS

TABLES

1.0 EXISTING WETLAND RESOURCE AREAS TO BE ALTERED

This narrative serves as a guidance document for the restoration of a wetland system proposed to be altered by the risk-based clean-up and remediation of the site totaling approximately 1.5 acres. Areas to be remediated are part of a Bordering Vegetated Wetland (BVW) adjacent to the new Keith Middle School construction site in New Bedford, Massachusetts (the site). The boundary of the bordering vegetated wetlands has previously been confirmed as accurate.

1.1 Wetland Vegetation

The remediation activities will result in approximately 1.5 acres of temporary alteration to the surrounding BVW. The surrounding BVW is well vegetated with a diverse community consisting of red maple trees and saplings, highbush blueberry shrubs, viburnum shrubs and emergent herbaceous plants.

Existing species dominating the BVW are listed below in Table 1 – *Existing Dominant Species in Adjacent Bordering Vegetated Wetlands*. The proposed species to be planted will replace the wooded wetland system composition in kind with similar density and species as required by the Massachusetts Wetland Regulation's Performance Standards.

TABLE 1 – Existing Dominant Species in Adjacent Bordering Vegetated Wetland

Common Name	Scientific Name	USFWS-Wetland Indicator Category
Viburnum	*Viburnum spp.*	FACW
Cinnamon fern	*Osmunda cinnamomea*	FACW
Red Maple	*Acer rubrum*	FAC
High bush blueberry	*Vaccinium corymbosum*	FACW
Swamp azalea	*Rhodedendron viscosum*	OBL

2.0 WETLAND RESTORATION DETAILS

2.1 Introduction

The approximate 1.5 acres of restoration will occur throughout the wetland area, wherever remediation has resulted in alteration or loss of the wetland. Remediation means removal of all on-site soils and/or media that are contaminated with PCB in excess of 1 ppm. PCB contamination of the wetland is from material moving down into the wetland from the up-

gradient site. It is the intention of this Design to fully restore the wetland to the previous elevation and vegetative community that existed prior to any clean-up and remediation activities. Removal of the contaminated material will be conducted under the supervision of a licensed site professional (LSP) as required by the Massachusetts Contingency Plan, 310 CMR 40.000.

2.2 Erosion Controls

Erosion control during construction activities, including wetland restoration shall adhere to the specifications detailed on the plan submitted with the Notice of Intent titled Wetlands Sampling Grid. In particular reference to construction of the wetland restoration area, a silt fence reinforced by hay bales staked end-to-end will be placed within the wetland to separate and protect areas not proposed for remediation. In the event that flooding rains occur or excess water develops in the work area, the applicant will be proposing a strategy to de-water the site and properly treat any discharge.

Remediation activities will result in some areas being cleared of existing vegetation and excavated. NAA recommends that if large trees need to be cut to allow equipment access, the stumps should remain to minimize soil disturbance. Leaving the stumps will increase the likelihood that the trees will sprout new growth. Any debris, including slash and felled trees will be stockpiled in the upland area adjacent to the site work. If the vegetative debris contains contaminated soil remnants, it will be handled and disposed of under the supervision of an LSP. Contaminated soil will be stored and handled under the supervision of an LSP and disposed of in accordance with all state and federal laws governing the disposal of such. If the contaminated material cannot be immediately removed from the site, proper storage shall be ensured by the LSP.

Individual large diameter trees that are Facultative or wetter will be evaluated and marked to remain in the wetland restoration area to take advantage of their shading effect. Selection of canopy trees will be performed by the qualified professional hired to oversee the wetland restoration activities. This will also create a pit and mound topography creating microenvironments. The root systems of these stems should be evaluated prior to excavating soils in the vicinity of their stems to prevent existing tree mortality. Based on our inspection of this area, the wetland indicator canopy is fairly dense and consists of some large red maples, oaks and willows.

2.3 Hydrology

The hydrology at the wetland restoration site is critical in controlling the plant community that develops. Therefore, hydrology must be evaluated before remediation commences. Monitoring by a qualified professional trained in soil evaluation and hydrology is a necessary component to the overall success of wetland restoration. The name, affiliation, address, telephone number and qualifications of the individual or firm to oversee the wetland restoration process shall be provided to the Commission for approval at least two (2) weeks prior to initiation of the work.

The restoration area will be excavated to the extent necessary to remove the contaminated soil. Soil samples taken within the wetland reveal that the contamination is limited to within approximately the top 6 inches. Prior to any excavation, the existing elevations will be determined. NAA intends that once the work is complete, the final elevations will be the same as current elevations. Any soil amendments needed to create a soil profile to support the planted wetland vegetation will be placed to bring the ground surface to finished elevation. Elevations may be adjusted in the field based on existing field conditions. Excavation should be completed during non-flood conditions. If the adjacent BVW is flooded, activities should be postponed until drier conditions exist or until the Commission has approved a de-watering plan.

2.4 Soils

An important aspect of wetland restoration is the proper use of soils. NAA proposes to supplement the restoration area as necessary with soil amendments brought in from off-site. Composition of soil amendments needs to provide an 8-10% organic component. The development of hydric soils provides substrate for wetland plants, which in turn supports wildlife habitat. Hydric soil acts as a sponge to treat groundwater, adsorb and absorb pollutants, and support vegetation that slows floodwaters. Appropriate hydrology must be provided to maintain the soils in a hydric condition. Prior to placement of soil amendments in the restoration area, all excavation within the restoration area to appropriate sub grade elevations will be completed.

Soil translocation is the preferred method for obtaining replication soils. Based on NAA's site inspection and review of the work scope, it is assumed supplemental soils will be necessary. Organic soils necessary for final grading within the wetland restoration area will be brought in from an off site source. The amended soils used for the replication area A-horizon will consist of a mixture of 8-10% organic and the remainder of mineral materials. These materials will be uncontaminated and will contain no woodchips. The organic material will be well decomposed. Clean leaf compost will be sought for use in this profile layer. The mineral materials will contain minimal quantities of gravel or boulders.

The material brought in from off-site will not be stockpiled for more than two (2) weeks. While it is stockpiled, it will be kept wet. Soils will be transported in clean vehicles so that no exotic/invasive seeds from other sites will be mixed in with them. Documentation of the soil's origin will be submitted with the report provided to the Commission upon completion of wetland restoration. Included in this documentation will be a statement from the source of the soil amendments that no source for invasive plant species will be found in the soils.

2.5 Planting

In accordance with 310 CMR 10.55, at least 75% of the surface area of the restoration area must be re-established with indigenous wetland plant species within two growing seasons. NAA has determined that the vegetative re-establishment will be successful, as evidenced by the suitability of the existing hydrology within the wetland restoration area.

The planting procedures will be overseen by qualified professionals with wetland science training. The name, affiliation, address, telephone number and qualifications of the individual or firm to oversee the wetland restoration process shall be provided to the Commission for approval at least two (2) weeks prior to initiation of the work.

Once the restoration area is properly prepared, it will be seeded with New England Wetmix at a rate of one pound per 5000 square feet as an understory seeding, to stabilize the area prior to planting bare root nursery stock. The wetland seed mix contains a wide variety of native seeds that are suitable for most wetland mitigation and restoration sites, which are not permanently inundated. All species are best suited to moist disturbed ground as found in most wet meadow, scrub shrub, or forested wetland mitigation and restoration areas. During the first season of growth, several species will produce seeds, while other species will produce seeds after the second growing season.

The wetland seeds in this mix can be hand sown, dispersed with a hand-held spreader, or hydro-seeded, as long as there is no permanent snow cover. The seed mix should be lightly raked to ensure proper soil-seed contact. Seeding can take place on frozen soil, as the freezing and thawing dynamics will work the seeds into the soil. Species used in the New England Wetmix include the following species at varying proportions:

TABLE 2 – Wetmix Species

Common Name	**Scientific Name**
Fringed Sedge	*Carex crinita*
Bearded Sedge	*Carex comosa*
Blue Vervain	*Verbena hastata*
Green Bulrush	*Scirpus atrovirens*
Woolgrass	*Scirpus cyperinus*
Joe-pye Weed	*Eupatoriadeophus maculates*
Chufa	*Cyperus esculentus*
Hop Sedge	*Carex lupulina*
Boneset	*Eupatorium perfoliatum*
Red-Top Panic Grass	*Panicum rigidulum*

Bare root nursery stock will supplement the wetland seed mix. Trees will be planted at 12 feet on center and shrubs will be planted 8 feet on center as recommended by the Department of Environmental Protection. Shrub and tree densities will be used to determine the total number of specimens within the restoration area. The wetland professional shall be responsible to establish the plantings in a naturalistic manner (i.e. clumping, mini-communities, etc.). It is expected that the surrounding forested wetland will provide a supplemental seed source. In addition, NAA recommends a planting plan that improves the diversity of the north area of the site, where the Phragmites dominates. In this area, NAA is recommending a mix of buttonbush and swamp azalea shrubs. (See attached memo).

The following commercially-available bare root nursery stock will be used in duplicating the vegetative components of the altered forested wetland and adjacent naturally occurring wooded swamp:

TABLE 3 – Plant Material

Common Name	Scientific Name	USFWS-Wetland Indicator Category
Red maple	*Acer rubrum*	FACW
Sweet pepperbush	*Clethra alnifolia*	FAC
Winterberry	*Ilex verticillata*	FACW
Highbush blueberry	*Vaccinium corymbosum*	FACW
Buttonbush	*Cephalanthus occidentalis*	OBL
Swamp Azalea	*Rhododendron viscosum*	OBL

In addition, consideration will be given to leaving existing mature upland trees on hummocks, if any, within the restoration area if they are facultative or wetter, as they may provide shading to the plantings installed around these hummocks. This consideration shall be made by the Wetland Professional hired to oversee the entire restoration effort.

Proper measures will be taken to reduce/eliminate the risk of establishment of invasive species. Invasive species will not be present in soil amendments. Use of hydro-seeding has been found to stabilize a site quickly and may possibly hinder the growth of invasive species. If hydro-seeding is not practical due to the density of remaining vegetation, the area can be seeded by hand.

TABLE 4 – Invasive Species

Common Name	Scientific Name
Purple Loosestrife	*Lythrum salicaria*
Common Reedgrass	*Phragmites australis*
Buckthorn	*Rhamnus Frangula alnus*
Honeysuckles	*Lonicera spp.*
Garlic Mustard	*Alliaria petiolata*
Japanese Knotweed	*Polygonum cuspidatum* or *Fallopia Japonica*
Japanese Stilt Grass	*Microstegium vimineum*
Reed Canary Grass	*Phalaris arundinacea*
Bittersweet nightshade	*Celastrus Orbiculatus*
Black Swallow-wort	*Cynanchum nigrum*
Pale Swallow-wort	*Cynanchum rossicum*

2.6 Schedule

All planting will occur at the beginning or end of the growing season. Fall plantings should be done before the first frost. However, shrubs and trees may be planted up to October 26th, weather permitting. It should be noted that some plant species are ill-suited to fall planting (including red maple) and therefore, individual plant tolerances should be considered prior to scheduling and planting.

Wetland vegetation shall not be placed in the restoration area until the qualified wetland professional has verified that the final grade for the area is accurate. This surface grade measurement will be collected by field instrument survey and verified by the wetland professional-in-charge.

If for some reason the site is excavated to the sub grade in the fall and a delay is inevitable, consideration will be given to stabilizing the site for winter, and conducting the final grading and planting in the spring.

3.0 MONITORING

In order for a successful restoration effort, the project will be supervised by a qualified professional during all work phases. The project monitor shall be present during the most important tasks which include:

1. Before vegetation clearing and grading to inspect the placement of the erosion controls. Canopy trees to remain, if any, will be selected and tagged with tree marking paint at this time.

2. Before placement of soil amendments to confirm post-construction ground water elevations and soil profile for the restoration area, and to inspect organic material.

3. Before installation of plant material to ensure specie types and health and to field check final grading.

4. During planting and seeding to inspect planting techniques and to direct placement of plantings.

5. After one growing season to observe vegetation development, to identify invasive species challenges, and to evaluate overall regulatory compliance.

6. After two growing seasons to determine vegetation development and regulatory compliance.

Initially, a report shall be submitted to the Commission by the Project Monitor certifying that the restoration work was completed in compliance with this design. A monitoring report shall then be submitted to the Commission in the late spring and at the end of each of the first two growing

seasons. Reports will include recommendations for additional plantings should the restoration area appear unlikely to meet the 75% re-establishment standard within two years. Monitoring for invasive species will also be conducted and any invasive species noted should be handpicked before becoming widespread and established. The final monitoring report will be accompanied by an as-built plan and will indicate the conditions at the restoration site have been successfully restored.

The wetland restoration guidelines will be followed to ensure the success of the restoration. However, in the event of unforeseen on-site challenges, our efforts and design will be evaluated and changes made to ensure its long term success.

4.0 REFERENCES

Massachusetts Department of Environmental Protection Guidance No.: BRP/DWM/WetG02-2 *Massachusetts Inland Wetland Replication Guideline*; dated March 1, 2002

NOVER-ARMSTRONG ASSOCIATES, INC.
Carver Square Marketplace, 124 Main Street, Unit 2GG
Carver, Massachusetts 02330
Telephone 508.866.8383
Facsimile 508.866.9898

MEMORANDUM

TO: Alan Hanscom
BETA Group, Inc.

FROM: Lenore White, PWS

RE: **Planting Plan**
McCoy Field
New Bedford, MA
NAA File P1372

DATE: 05/25/05

Nover-Armstrong Associates, Inc (NAA) is proposing the following planting plan to accompany the Wetland Restoration Design. The locations set forth below follow the grid locations identified on the Notice of Intent plan, titled Wetlands Sampling Plan. Trees are to be planted 12 feet on center and shrubs are to be 8 feet on center.

WD 19 through 24 is to be planted with a matrix of red maple, high bush blueberry, sweet pepper bush, and winterberry.

WD 25 through 27 is to be planted with an equal mix of winterberry and swamp azalea. Any lower elevations can be supplemented with buttonbush.

WD 11 through 15 is to be planted with an equal mix of red maple, sweet pepper bush and high bush blueberry.

WD 5 and 6 and WE 3 is to be planted with an equal mix of swamp azalea, high bush blueberry and winterberry.

WH 1 is to be planted with an equal mix of buttonbush and swamp azalea.

NAA suggests that the Wetlands Sampling Plan be amended with the above noted information. Please contact me should you have any additional questions. Thank-you.

Appendix H

Certified Abutters List

I, Patricia Bonney, ~~Acting~~ Administrative Assistant to the Board of Assessors of the City of New Bedford, do hereby certify that the names and addresses as identified on the attached "Abutters List", RE: Plot 69 Lot 125 are duly recorded and appear on the most recent tax list. Date: 5/16/05

SUBJECT PROPERTY:

MAP 69 LOT 125

LOCATION Hathaway Blvd.

OWNER NAME City of New Bedford

MAILING ADDRESS

CONTACT PERSON James Smith, BETA Group

TELEPHONE NUMBER 781-223-4670

REASON FOR REQUEST:

Notice of Intent Filing - Conservation Commission

Map 69

CERTIFIED ABUTTER'S LIST

(VARIANCES and SPECIAL PERMITS)

(As required under Chapter 40, Section 11, Massachusetts General Laws)

PARCELS within a 100 Foot BUFFER

MAP/LOT	OWNER	ADDRESS
69/123	Sharon J. Reynolds Trustee Summit Nominee Realty Trust	2484 Railside Circle SW, Byron Center, MI 49315
69/94	Thomas Dolores	177 Summit St., New Bedford, MA 02740
69/96	Bethel AME Church	532 County Street, New Bedford, MA 02740
69/97	Bethel AME Church	532 County Street, New Bedford, MA 02740
69/98	"	"
69/99	"	"
69/100	"	"
69/93	"	"
69/345	City of New Bedford, NBRPS	131 William St. New Bedford, MA 02740

I, [signature], Acting Administrative Assistant to the Board of Assessors of the City of New Bedford, do hereby certify that the names and addresses as identified on the attached "Abutters List", RE: Plot 75 Lot 167 are duly recorded and appear on the most recent tax list. Date: 5/3/05

SUBJECT PROPERTY:

MAP 75 LOT 167

LOCATION Hathaway Blvd.

OWNER NAME City of New Bedford

MAILING ADDRESS

CONTACT PERSON James Smith

TELEPHONE NUMBER 781-223-4670

REASON FOR REQUEST:

Notice of Intent Filing - Conservation Commission

9

Map 69

CERTIFIED ABUTTER'S LIST

(VARIANCES and SPECIAL PERMITS)

(As required under Chapter 40, Section 11, Massachusetts General Laws)

PARCELS within a 100 Foot BUFFER

MAP/LOT	OWNER	ADDRESS
69/345	City of N.B., MA H.S.	131 William St. New Bedford, MA 02740
69/125 (75/200) NR	City of New Bedford	131 William St. New Bedford, MA 02740
69/133	Christie D. Rebeiro Davis Gomes Jr.	244 Summit St. New Bedford, MA 02740
69/124	STEVEN J. Pina Diana Pina	238 Summit St. New Bedford, MA 02740
69/111	Stephanie A. Rocha Michael Chase	235 Summit St. New Bedford, MA 02740
69/122 (120) ABR	Nathalie Mendes Marcel Mendes	154 Macomber St. New Bedford, MA 02740

Map 75

CERTIFIED ABUTTER'S LIST

(VARIANCES and SPECIAL PERMITS)

(As required under Chapter 40, Section 11, Massachusetts General Laws)

PARCELS within a 100 Foot BUFFER

MAP/LOT	OWNER	ADDRESS
75/280	Delta M. Martins Manuel Martins	32 Donny Dr. New Bedford 02740
75/282	" "	" "
75/283	David Neves c/o Rose Neves Lamba	30 Nashua St. New Bedford 02740
75/285	" "	" "
75/286	Lillian Clark Vraina Clark	18 Ellis St. Rumford, RI 02916
75/287	Lillian Clark Vraina Clark	
75/288	Norma Rodrigues	48 Nashua St. New Bedford, MA 02740
75/289	Lillian S. Clark Rodrigues Fam. Irr. Trust	" "
75/290	" "	" "
75/291	" "	" "
75/195	Maria A. Lopes Thomas Lopes	147 Auburn St. New Bedford, MA 02740
75/196	Esperanza Gilmette	277 Summit St. New Bedford 02740
75/207	Lori B. Michaud	283 Summit St. New Bedford 02740

Map 75

CERTIFIED ABUTTER'S LIST

(VARIANCES and SPECIAL PERMITS)

(As required under Chapter 40, Section 11, Massachusetts General Laws)

PARCELS within a 100 Foot BUFFER

MAP/LOT	OWNER	ADDRESS
75/165	Michael Gubler	156 Campbell St. New Bedford 02740
75/166	"	"
75/157	Maureen G. Woolley Brian Woolley	249 Summit St. New Bedford 02740
75/163	Dorothy L. Montague James Montague Jr.	253 Summit St. New Bedford 02740
~~75/166~~ 75/344 (91)	City of New Bedford Fred Couza	133 William St. New Bedford 02740
~~75/344 (91)~~ 75/164	Dorothy L. Montague James Montague Jr.	253 Summit St. New Bedford 02740
75/5	John Ferreira	288 Durfee St. New Bedford 02740
75/6	Adevinia M. Rito Duarte M. Rito	284 Durfee St. New Bedford 02740
75/7	Corner Sports Store Inc.	319 Hathaway Blvd. New Bedford 02740
75/8	Comm. of Mass.	100 Cambridge St. Boston, MA 02202
75/12	City of N.B., N.B. H.S.	131 William St. New Bedford 02740

Map 75 outer

CERTIFIED ABUTTER'S LIST

(VARIANCES and SPECIAL PERMITS)

(As required under Chapter 40, Section 11, Massachusetts General Laws)

PARCELS within a 100 Foot BUFFER

MAP/LOT	OWNER	ADDRESS		
	~~Isabel S. Pacheco~~			
75/269	Manuel Pacheco	10 Nashua St.	New Bedford	02740
75/558	"	"	"	
75/530	Rose Lomba	30 Nashua St.	New Bedford	02740
75/272	Adeline Cruz C/O Edward Cruz	75 Florence St.	New Bedford	02740
75/275	"	"	"	
75/276	"	"	"	
75/277	Norma Rodrigues	48 Nashua St.	New Bedford	02740
75/278	Norma Rodrigues	48 Nashua St.	New Bedford	02740

Map 81

CERTIFIED ABUTTER'S LIST

(VARIANCES and SPECIAL PERMITS)

(As required under Chapter 40, Section 11, Massachusetts General Laws)

PARCELS within a 100 Foot BUFFER

MAP/LOT	OWNER	ADDRESS
81/58	Barbara J. Deeley Kenneth Offley	325 Durfee St. New Bedford 02740
81/129	Janet L. Williams Barry Williams	(331 Durfee St. New Bedford, MA 02740) 55 Potter St. New Bedford 02740
81/126	Hilda O. Williams Barry Williams	" "
81/130	Liesdatte Hunt	345 New Boston Rd. Fairhaven, MA 02719
81/11	Elizabeth A. Zarecki John Zarecki	299 Durfee St. New Bedford 02740
81/33 (NAN)	Francis Morin Edmond Morin Jr.	293 Durfee St. New Bedford 02740 (c/o ~~Ann Murphy~~ 477 Mattfield St. W. Bridgewater, MA 02379
81/12	Joseph Pike Jr.	295 Durfee St. New Bedford, MA 02740
81/16	Joseph Pike Jr.	c/o Linda Wood 8 Meadowbrook Dr. Marlboro, MA 01752
81/23	Jorge Guzman	287 Durfee St. New Bedford, MA 02740
81/24	"	" "